DOCUMENT RESUME

ED 052 583 EC 032 848

AUTHOR Mintz, Raymond D.; And Others

TITLE Study of the Need for Educational Manpower for

Handicapped Children and Youth: Part A - Phase III.

Final Report.

INSTITUTION Operations Research, Inc., Silver Spring, Md.

SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE),

Washington, D.C.

REPORT NO TR-602
BUREAU NO BR-8-9028
PUB DATE May 70

CONTRACT OEC-0-9-08928-0710

NOTE 377p.

EDRS PRICE EDRS Price MF-\$0.65 HC-\$13.16

DESCRIPTORS *Exceptional Child Research, Handicapped Children,

*Information Systems, Information Utilization,
*Manpower Needs, *Models, National Surveys, *State

Surveys, Statistical Data

IDENTIFIERS Manpower Requirements Projection Model

ABSTRACT

Phase III of the Study of the Need for Educational Manpower for Handicapped Children and Youth, in demonstrating the feasibility of the Manpower Requirements Projection Model (MRPM), gathered data in the states necessary for implementation of the model. The MRPM was developed to enable state or local administrators of special education to estimate manpower needs and handicapped child population. The 50 state special education agencies were surveyed concerning the flow and utilization of special education information and their capability to utilize the model. It was found that few states had special education information systems capable of providing predictive as well as evaluative data, and in few states did data on handicapped children include all sources of education. It was concluded that, despite some obstacles to automating special education data processing, almost all states had the capability to utilize the MRPN and it could be operational in two to three annual data cycles in most cases; availability of information flow capable of providing required input was a major factor affecting implementation. Appended are extensive state data summaries (personnel data and special education enrollment) and information flow implementation and maintenance cost estimates for each state. (EC 032 847 and ED 032 849-EC 032 852 contain related information.) (KW)



F0000000

Operations Research, Inc. A Subsidiary of Leasco Systems Corporation

ERIC

The research reported herein was performed pursuant to Contract No. OEC 0-9-08928-0710 with the Bureau of Education for the Handicapped, Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. The points of view or opinions stated do not, therefore, necessarily represent official Bureau position or policy.



U.S. DEPARTMENT OF HEALTH, ADUCATION & WELFARE
OFFICE OF EDUCATION
THIS ODCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

OPERATIONS RESEARCH, Inc.

SILVER SPRING, MARYLAND

STUDY OF THE NEED FOR EDUCATIONAL MANPOWER FOR HANDICAPPED CHILDREN AND YOUTH— PHASE III REPORT

PART A-PHASE III FINAL REPORT

1 May 1970

Prepared under Contract No. OEC 0-9-08928-0710
for the Bureau of Education for the Handicopped,
Office of Education, U.S. Department of Health, Education, and Welfare



PREFACE

The "Study of the Need for Educational Manpower for Handicapped Children and Youth--Phase III Report" has been organized so that appropriate parts of it may be conveniently distributed to those most immediately concerned with the content of each part. The general content of each part is as follows:

- Part A, Phase III Final Report, contains the overall report on the Manpower Requirements Projection Model (MRPM) validation efforts and the activities, findings, and conclusions of the state survey. Its appendices also contain implementation cost estimates and summaries of the enrollment and employment data collected during the state survey.
- Part B, Special Education Staff Users' Guide, contains both the general and the detailed guidance necessary for non-technical oriented personnel for understanding and implementation of the MRPM.
- Part C, Manpower Requirements Projection Model— <u>Technical Documentation of the Computer Program</u>, which is written for the technically oriented user of the MRPM, provides the technical details necessary for understanding the model formulations and computer programs.
- <u>Fart D, State Analysis Reports</u>, includes individual reports on each state's special education information flow.

Parts B and C are bound together in one volume; Part D is divided into three volumes for ease in handling.



ACKNOWLEDGMENTS

The project team wishes to express its appreciation to Dr. James J. Gallagher, Dr. Michael Marge, and Dr. Edwin W. Martin for their valuable guidance and assistance in the performance of this study. Special thanks are offered to Dr. Leonard J. Lucito, who served as project officer.

Additional appreciation is extended to the following members of the Bureau's Research Advisory Group for their cooperation and assistance:

Faul Ackerman
Bertram Mogin
Dr. James Moss
Lee 1.0ss
Bertram Weiner
Dr. Frank B. Withrow.

The project team for Operations Research, Inc., included:

- R. D. Mintz, Program Director, who was responsible for the overall technical direction and management of the project team;
- C. M. Koch, Project Manager, who was responsible for the day-to-day direction of the project team, and who participated in the state survey analysis and co-author of the Phase III Report;
- B. A. Johns, Assistant Project Manager, who was responsible for the design of the Manpower Requirements Projection Model, participated in the state survey analysis, and co-authored the Phase III Report; and
- M. W. Brown, T. R. Jungreis, J. E. Kelly, J. J. Koshel, J.O'Donnell, and J. Peterson, state survey analysts.



SUMMARY

BACKGROUND

Under the auspices of the U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Education for the Handicapped, a three-phase study was initiated by Operations Research, Inc. (ORI), to develop an operational model that would permit organized consideration of the factors affecting the requirements for special education manpower, make a projection of these requirements, and, through a comparison with the supply potential, determine the manpower gap. This information could then be used as a basis for establishing programs to relieve the special education manpower shortage. The model would be made available to each of the states for voluntary application.

In Phase I of this study, the tentative model for estimating manpower requirements was formulated. Phase II objectives included the definition of operational methods, based on a pilot survey of data availability, and the definition of data objectives and collection strategies to be used in the 50-state survey.

Analysis of the results of the five-state pilot survey performed in Phase II indicated that few of the data elements required by the Manpower Requirements Projection Model (MRPM) were available at the state level in the necessary level of detail; that many of the required data elements were available at the local level but were not being transmitted to the state level; and, finally,

Detailed descriptions of the work performed in Phases I and II are provided in ORI Technical Report 593, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase I Report, 13 December 1968, and ORI Technical Memorandum 126-69, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase II Report, 4 June 1969.

that in some states many of the required data elements, although presently unavailable, could be developed.

As a result of the unavailability of satisfactory sets of data, it was not possible to conduct a practical model test utilizing state-level data. It also became apparent that the objectives of Phase III would have to include not only the collection of handicapped child population and special education employment data currently available in each state but also an assessment of the capabilities of the individual states to utilize the model. This assessment would include an analysis of existing information flow processes to provide the necessary model input data, a review of the capability of existing automatic data processing equipment for processing the needed information and running the model itself, and an assessment of the state's special education staff's capability to utilize the model.

Furthermore, it was determined that Phase III would provide BEH with guidance regarding the resource requirements for the development of an information system, at the state level, capable of supporting model requirements. It was apparent that model feasibility testing would have to be conducted on a local level, where data not already available could be extracted from records with a minimum of difficulty.

Thus, from the Phase I development of tentative models and the Phase II exposure to the practicalities of application, the objectives and activities necessary for Phase III were evolved.

This summary contains an overview of the results of the activities undertaken in Phase III to accomplish the stated objectives. It includes a brief review of the model validation procedure, a discussion of the major survey concerning the flow and utilization of special education information, and a review of the general conclusions that were reached as a result of the analysis of the survey findings.

MODEL DEMONSTRATION AND VALIDATION

When it became apparent that the data necessary to demonstrate the model would not be available at the state level, it was decided to simulate a state condition by substituting a special school district having a large handicapped child population, a variety of special education programs, and at least 4 or 5 years of historical records. The test procedure used to determine the validity of the projections involved the collection of the required data elements from the historic files, input of the data into the model, operation of the model to provide manpower projections, and comparison of these computed projections with the actual employment records.

The model demonstration proved that collection of the data required by the model is feasible and that, when the necessary data is provided as input, the computer programs are operational. The mathematical relationships established within the model were also proven to be valid.

SURVEY FINDINGS

In surveying the 50-state special education agencies, a great variety was found in those administrative facets of handicapped child education that affect the flow and utilization of special education information. The major variables that were found to affect the model application potential are outlined briefly below:

- Distribution of responsibility for the education of handicapped children
- Organization of state special education agencies
- Level of data currently available at state special education agencies
- Need for additional special education data
- Attitude toward model application
- Legislative, geographic, and fiscal factors
- Existing information flow characteristics
- Availability of data elements needed for MRPM application
- Availability of data processing resources.

Each state has its own special education "personality," made up of variations in the foregoing characteristics. The findings and recommendations as they specifically concern each state are presented in detail in the State Analysis Reports contained in Part D of this Phase III Report. The broad scope of these variables as they affect the considerations of this study are briefly discussed in the subsequent paragraphs.

<u>Distribution of Responsibility for the Education of Handicapped Children</u>

Responsibility within the state for the education of handicapped children almost never rests with one state agency alone; other state agencies besides
the education departments have a portion of the responsibility. The reasons
for the dispersion of responsibility include jurisdictional assignments resulting
from services being provided by multiple sources, functional assignments established by the organization of state services, specialization of services in state
institutions, and the services of private facilities. Each additional agency,
autonomous institution, and private facility adds to the complexity of the information flow by requiring additional coordination and adding to the number of
sources from which data must be collected.



Organization of State Special Education Agencies

The state special education agency (or its equivalent) will be the focal point of the special education information system and the prime mover in the implementation of the MRPM. Therefore, its function in the state educational hierarchy, its strengths, and its weaknesses will have important bearing on the potential for MRPM use.

The functions of special education agencies vary widely from state to state. The range of legislated responsibilities runs from practically no responsibility to rather complete control of the state's education effort for handicapped children. Agencies may—

- a. Oversee distribution of funds, exercising only enough control to obtain information upon which to base fund disbursements
- b. Provide guidance to local education agencies for the formulation and development of special education programs
- c. Enforce state special education regulations pertaining to diagnosis, establishment of classes, approval of curricular content, teacher approval, and individual child applicant approval.

The organizational level of the special education agency within the state department of education varies considerably. In some states, the director of special education is directly responsible to the superintendent of education (or his equivalent) and in other states he may be several levels removed. The ability to influence information flow from local school districts and other concerned agencies is frequently affected by the special education agency's organizational position.

The special education intra-agency organizations also exhibit a variety of structures that can affect model application. In some states, communications and information flow within the agency are excellent, but there are also complex agencies where coordination between staff members is minimal or nonexistent.

Level of Data Available at State Special Education Agencies

The effects of the type of organization and functions of a state special education agency frequently have a direct bearing on the information flow and consequently on the type of data to which the agency has access. The following examples summarize the different levels of data found to exist at various state special education agencies:

- Sufficient to support financial disbursement only
- Sufficient only to satisfy the requirements to qualify for Federal assistance



- Sufficient to satisfy the specific needs of only a portion of the special education programs
- Sufficient for a specific purpose, possibly to reinforce some request of the legislature
- Sufficient to provide statistics for annual reports.

It was found in many states, however, that although the current level of data detail at the state level could not support the model, only minor modifications to an already existing information flow would be required to provide data sufficient for initial model implementation.

Need for Additional Special Education Data

Many of the state special education directors were very much aware of the inadequacy of the information available to them. In general, they need additional data to document services provided, to analyze the status and effectiveness of their present programs, and to plan for both the near-future level of activity and programs requiring a long range development. The directors recognized that the implementation of the MRPM would provide them not only with a manpower projection capability but also with many of the data elements they require to satisfy their other management needs. As a result, the requirement for data collection for model application purposes could provide the impetus to initiate improved data collection procedures in many states.

Attitude Toward Model Application

In most cases the state special education agency directors felt that the basic data elements required for model implementation would be useful for operational analysis; however, there was not universal agreement that all the data elements were always applicable. Where the full concept of the model potential was well understood, a definite interest in utilization of the model was exhibited.

Legislative, Geographic, and Fiscal Factors

It has alread; been mentioned that each state has its own characteristics that make it at least a little different from its sister states. This uniqueness becomes quite evident in the area of handicapped child education in the varying definitions of handicapping conditions, the difference in the number of handicapped areas served, the changes in fiscal attitudes toward special education, the variety of enabling legislation, the differences in state and local sponsorship of special education, the problems of population density/dispersion, and the availability of special education manpower. The MRPM has the flexibility to incorporate these unique characteristics in its application, but the state's special education information flow must also be capable of considering the influence of those factors.



Existing Information Flow Characteristics

Every state has some type of information flow from which the special education staff can extract data pertinent to its function. However, the characteristics of the existing flow certainly affect the content, utility, and efficiency of the information system. Among the elements to be considered and influenced by special education if it wants improved information flow are:

- The purpose of the system, i.e., to serve central education or special education
- The basic information flow patterns, i.e., flow from local education agency to state special education agency
- The variety of forms in use and their adaptability for conversion of data for automated processing
- The degree of automation
- Reporting time period variations.

The incorporation of da's elements into existing systems at the state level was often not the result of a preconceived information system design, but rather the result of building on information already available, or the cumulative result of special information requirements. Frequently, information systems were designed to incorporate existing characteristics rather than modify the conditions to improve the flow.

Availability of MRPM Data Elements

The full utilization of the Manpower Requirements Projection Model requires that certain data elements be available for input to the Model program. Often, data elements required are at a level of detail below that which is currently available at the state special education agency. However, the model is designed to provide a framework for the systematic consideration of all of the factors which may affect special education manpower requirements. In this respect, it is more sophisticated than other projection techniques and will provide more accurate projection results. The orderly and logical consideration of all those factors therefore requires a more detailed level of input, which is frequently useful for many other management applications also.

The following paragraphs briefly discuss the required data elements and the condition of their availability as found in the state special education agencies during the state survey visits.

Children Identified as Needing Special Education. The enrolled children are almost always accounted for, in one way or another, at the state level. However, to be usable by the MRPM, enrollment data must be broken down by age, handicapping conditions, and by education program. Enrollment



data by handicap group was usually available, but further delineation (when it did exist) was generally by education level, e.g., elementary, primary, intermediate, secondary, or high school, and not by individual year of age.

Records pertaining to those children identified and waiting to be enrolled were scarce at state level and, when available, were usually uncompiled and incomplete.

<u>Unidentified Handicapped Child Population</u>. In the absence of comprehensive diagnostic capability, most states use prevalence rates to estimate the number of children in each category of each handicapping condition. Although a few states use rates based on special studies, most states use the national prevalence rates or modifications of national rates.

Mobility of Special Education Population. The size of the identified handicapped child population in a state is altered by the addition of new children, including new enrollees and incoming interstate transfers, and by attritions (graduations, dropouts, outgoing interstate transfers, death, etc.) that deduct from the total population. The availability of data pertaining to these mobility factors was usually not satisfactory for MRPM purposes.

Special Education Simulation Variables. Educational program mix trends form one of the data elements useful in the projection of manpower requirements, because their variation can affect manpower requirements. The state survey indicated that historical records usually contain sufficient data to enable special education consultants or staff to plot an interpretation of trends in program mix.

Other simulative data elements include personnel types and personnel/pupil contact ratios. Personnel types were identifiable, because almost all states required that direct contact personnel have some special qualifications unique to the handicapped area to be served. Personnel/pupil contact ratios for the state's public school system are almost always formally regulated.

<u>Yearly Projections of General Child Population By Age</u>. Many states had population projections or statistics that could be utilized in the preparation of annual population projections by single year of age, for the period for which the projections were desired.

Special Education Personnel Supply. The basic data was usually found to be available within the state special education office, and, although it was rarely summarized and totaled by area of specialization, it could generally be summarized with a little manual tabulation.

Availability of Data Processing Resources

The resources necessary for the implementation and application of the Manpower Requirements Projection Model include both manpower skills and data processing hardware capability. The availability and adequacy of both varied widely among the 50 states.

Manpower. Talent with the required capability to implement the information flow necessary to support the MRPM was rarely found within the existing special education staffs, because these skills are not indigenous to normal special education operations. Within almost every state government, however, there is an organization with the necessary types of personnel skills.

Hardware. The capacity required of the available computer hardware falls into two categories: capacity to process an information system, and capacity to process the Manpower Requirements Projection Model. Most state education agencies theoretically have the hardware capability, or access to it through other agencies or universities, to process an information system.

The hardware capability requirements for the model generally exceed those of an information system, primarily because of the need for additional word storage capacity. A large majority of the states already have sufficient computer capability to run the MRPM program.

SURVEY CONCLUSIONS

During the state visits, the analysts performed those data collection and analytical functions that were necessary to the accomplishment of the project objectives. In each case recommendations for actions necessary to the implementation of the MRPM were prepared; these are provided in the State Analysis Reports, Part D of this Report. The conclusions derived as a result of the survey are summarized, in terms of project objectives, in subsequent paragraphs.

An effort was made to collect from the state special education agencies data that could be used to calculate current special education manpower requirements. Incomplete data collections occurred in many instances, because of the total non-availability of certain data, over-aggregation of data, or partial availability of data. Due to the inconsistent availability of data, the resultant calculations cannot be relied upon for an evaluation of current special education manpower requirements.

This data collection effort was most useful in the analysis of existing special education information flows, because, as the data were obtained, the source and flow were frequently revealed. The conclusions regarding the status of existing special education information flows at state level are summarized as follows:

• Few states have special education information systems that are capable of providing management-type information; i.e., data that has predictive as well as evaluative applicability. The need for additional data is quite evident. A major upgrading of the information flows within almost all states is indicated. To accomplish this objective, changes will have to be made by the

states—major in some, and relatively minor in others. The first step in upgrading the information available to special education administrators is to provide the agencies with an understanding of what types of information can be made available, how to obtain it, and how to use it. The recommendations contained in the individual State Analysis Reports should be of further assistance in attaining this understanding.

• In very few of the states is the data pertaining to handicapped children inclusive of all of the sources of handicapped child education—public schools, state schools and institutions, and private facilities. Usually, each agency maintains its own records. Such limited information would defeat the objective of the MRPM to project special education manpower requirements for the state's total handicapped child population.

It must be stressed that interagency cooperation and communication are absolutely essential to the establishment of a common handicapped child data base that will be representative of the state's total service requirements and responsive to each agency's information needs. Further, in some states, the special education agency's internal coordination and communication must be strengthened. Standardization of forms, data elements, data collection cycles, and timetables is a prerequisite to internal data flow stabilization.

Liaison between state level and local special education personnel is also essential to the establishment of an information flow. The greater the involvement of the state agency with the local agency, the better the information flow. A corollary benefit to greater involvement is the improved capability of state personnel to analyze and utilize the information collected.

The vast majority of states cannot easily obtain the information they need without benefit of ADP techniques. The manual operations are too time consuming for an already understaffed agency. The state survey analysis included an evaluation of the capability and availability of the existing data processing equipment for use in processing special education data and for MRPM application.

Most of the states have within their government organizations computer hardware capable of prorming the required processing for both the information flow and MRPM application, but this capability is frequently not

accessible to the special education agency. Although computer availability is a problem in many states, analysis reveals that the relatively limited application of automated data processing (ADP) techniques to the special education information systems is more the result of a combination of other constraints. The lack of appreciation for the potential availability of additional information through the application of ADP, and a limited understanding of how to initiate and apply ADP techniques, are major obstacles to automating special education data processing.

Another objective of the state survey was to evaluate the capability of state special education staffs to utilize MRPM capabilities. From discussions with, and observations of, the state special education staffs, it was concluded that almost all have the capability to utilize the model. However, the data to support the model must be developed, and in this respect some additional understanding is required by the special education community.

The improvement of information flow and data reliability means the acceptance by special education agencies, both at state and local levels, of the fact that each data source and each data element is an integral part of the overall system. Increased data availability need not always require increased work in data collection. Frequently, coordinated and systematic data collection will require no increase in effort over that already being expended but will yield much additional information.

Conclusions about the potential for application of the Manpower Requirements Projection Model are summarized in the following brief statements:

- The model is much needed.
- The concept has been favorably received.
- Some surmountable problems will be encountered in creating the necessary information flow.
- There should be no serious constraints because of computer capacity limitations.
- Once the implementation decision has been made
 by the state, the MRPM could be operational in
 two to three annual data cycles in most states.

Acceptance of the model concept and its potential for application is based upon the utility of various aspects of the model. Because the model has several capabilities, it has an appeal for various types of users and thus has a greater potential for application. The advantages of using a model to assist in the development of plans are these:

 a. When planners can see the implications of major decisions, they can spot potential problem areas and discover opportunities for remedial or preventative action.

- b. By comparing past performance with alternative courses of action, a repetition of past mistakes can be avoided.
- c. By applying long-range planning, special education personnel can cast a longer look ahead, with freedom to examine hypothetical solutions before decision time becomes critical.
- d. By providing the means for the rapid generation of revised plans, new directions can be quickly derived to meet unforeseen contingencies.

The model concept has been tested and is feasible. However, the major considerations affecting model implementation are the availability of an information flow capable of providing the required input and availability of hardware. Most of the data elements can be incorporated in the existing information flows in all but a few of the states, so that data should be available for implementation of the MRPM in from two to three annual data cycles, once the decision is made by each state to go forward. In most states the required hardware is available, and the small usage time required for model application should not cause much difficulty in obtaining the required computer usage time.

FURTHER FEDERAL ACTION

Many state agencies need encouragement in the form of incentive and leadership. The MRPM is a form of incentive in that, by providing the state agencies with management tools, it can help them to do their jobs better. The Phase III state visits provided initial leadership in many states by laying the groundwork for improving the information flow and creating a desire for better data. The impetus that has been gained as a result of this effort should be supplemented and supported by continued Federal sponsorship of programs to assist the states with the development of their information systems.

TABLE OF CONTENTS

		raye
	PREFACE	i
	ACKNOWLEDGMENTS	iii
	SUMMARY	v
	LIST OF FIGURES	xxi
	LIST OF TABLES	xxiii
I.	INTRODUCTION	A-1
	BACKGROUND	A-l
•	PURPOSE OF THE REPORT	A-2
	ORGANIZATION OF THE REPORT	A-3
II.	PHASE III STUDY OBJECTIVES	A- 5
	INTRODUCTION	A- 5
	SPECIFIED OBJECTIVES	A- 5
	ADDITIONAL REQUIREMENTS	A- 6
	ACCOMPLISHMENT OF OBJECTIVES	A- 6
III.	LIMITATIONS	A-7
	INTRODUCTION	A-7
	LIMITATIONS	A-7



Availability of Data at the State Level; Complexity of Handicapped Child Education Responsibilities; Availability of State Personnel; Length of Time for the State Visit

	CONCLUSION	•	•	•	•	A- 9
IV.	FINDINGS AND CONCLUSIONS		•	•	•	A-11
	INTRODUCTION	•	•	•	•	A-11
	MODEL DEMONSTRATION AND VALIDATION	•	•	•	•	A-11
	SURVEY FINDINGS		•	•		A-12
	Distribution of Responsibility for the Education of Handicapped Children; Types of State Special Education Organizations; Level of Data Available at State Special Education Agencies; Need for Special Education Data; Attitude Toward Model Application; Legislative, Geographic, and Fiscal Factors; Existing Information Flow Characteristics; Availability of MRPM Data Elements; Availability of Data Processing Resources					
	SURVEY CONCLUSIONS	•	•	•	•	A-2 9
	Status of Special Education Information Flow of State Levels; Degree of Federal Involvement; Manpower Requirements Projection Model Application Potential; Current Implementation Status; Cost Estimates for Information Flow Implementation and Maintenance					
v.	DESCRIPTION OF STUDY ACTIVITIES	•	•	•	•	A-3 9
	INTRODUCTION	•	•	•	•	A-39
	TASK 1 — REVIEW OF INFORMATION REQUIREMENTS	•	•	•	•	A-3 9
	Objective; Procedure; Results					
	TASK 2 — QUESTIONNAIRE ODIFICATION	•	•	•	•	A-40
	Objective; Procedure; Results					



	TASK 3 — MODEL DEMONSTRATION
	Objectives; Procedures; Results
	TASK 4 — DEVELOP FORMAT FOR ANALYSIS STATE DATA DEVELOPMENT POTENTIAL
	Objectives; Procedures; Results
	TASK 5 — SCHEDULE AND ARRANGE ON-SITE VISITS
	Objective; Procedure; Results
	TASK 6 — CONDUCT ON-SITE VISITS TO STATE SPECIAL EDUCATION AGENCIES
	Objective; Procedure; Results
	TASK 7 — PREPARE STATE ANALYSES A-59
	Objective; Procedure; Results
	TASK 8 — ESTIMATE STATE REQUIREMENTS A-61
	Objective; Procedure; Results
	TASK 9 — ESTIMATE MANPOWER SUPPLIES A-62
	Objective; Procedure; Results
	TASK 10 — DEVELOP REQUIREMENTS AND METHODS FOR STATE REPORTING OF MODEL RESULTS
	Objectives; Procedure; Results
	TASK 11 — ESTIMATE TEACHER TRAINER REQUIREMENTS . A-63
	Objective; Procedure; Results
	TASK 12 — ESTIMATE RESEARCH REQUIREMENTS A-64
	Objective; Procedure; Results
	VOLUNTARY TASKS
	Objective; Procedure; Results
71.	RECOMMENDED FURTHER ACTIONS
	IMPLEMENTATION OF THE MANPOWER REQUIRE- MENT PROJECTION MODEL
	State Implementation Demonstration; Regional Implementation Workshops; BEH Support of State Activities



S	SUGGESTED FURTHER RESEARCH	2
	Generalized Special Education Information Systems; Develop of a Manpower Supply Model; Development of Diagnostic Capabilities	
APPENDIX 1:	STATE DATA SUMMARIES	-]
APPENDIX 2:	COST ESTIMATES FOR IMPLEMENTATION AND MAINTENANCE OF INFORMATION FLOW 2.	-!



LIST OF FIGURES

		Page
1.	Target Group Population	A-44
2.	General Child Population Information	A-45
3.	Projected Personnel Input Proportions	A-46
4.	Projected Manpower Requirements	A-48
5.	Procedure for Analysis of Status and Development of a Data Element	A-54



LIST OF TABLES

			Page
1.	by the Manpow	of Validity of Projections Made er Requirements Projection Model; 1968-69 Manpower Requirements— etual	A-13
2.	Estimated Time	Frame for MRPM Implementation	A-34
3.	Data Developm	Summary for Special Education ent and Manpower Requirements el Application at State Level	A-37
4.		1968-69 Group Populations—	A-49
5.	Comparison of Based on Project Personnel/Pupi	1968-69 Manpower Requirements cted Actual vs Projected Desired l Contacts	A-50
Appen	dix 1 Tables:	State Data Summaries for Each of the 50 States	
Appen	dix 2 Tables:	Cost Estimate for Special Education Data Development and MRPM Application at State Level for Each of the 50 States	



I. INTRODUCTION

BACKGROUND

- 1.1 Under the auspices of the U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Education for the Handicapped, a study was initiated to investigate possible approaches to the development of a methodology that would assist in the determination of future special education manpower requirements. The objectives were to obtain an operational model that would permit organized consideration of the factors affecting the requirements for special education manpower, make a projection of these requirements and, through a comparison with the supply potential, determine the manpower gap. This information could then be used as a basis for establishing programs to relieve the special education manpower shortage. The model would be made available to each of the states for voluntary application.
- 1.2 In Phase I of this study the working definitions of key variables were developed and tentative models for estimating manpower requirements and supplies were formulated. Phase II objectives included the definition of operational methods based on a pilot survey of data availability, and the definition of data objectives and collection strategies to be used in the 50-state survey.
- Analysis of the results of the five-state pilot survey indicated that few 1.3 of the data elements were available at the state level in the detail required to fully utilize the Manpower Requirements Projection Model (MRPM) capability; that many of the data elements were available at the local level but were not being transmitted to the state level; and that some of the required data elements were unavailable in some states but could be developed.



- 1.4 As a result of the unavailability of satisfactory sets of data, it was not possible to conduct a practical test of the model utilizing state-level data. It also became apparent that the emphasis in Phase III would have to be shifted. The initial concept of collecting data for projection purposes had to be changed to not only emphasize the collection of data currently available, but also to include an assessment of the capability of
 - a. Existing information flow processes to provide the necessary model input data
 - b. Existing automatic data processing equipment to process the needed information and to run the model program
 - c. The special education staff to utilize the model.
- 1.5 It was further concluded that to be fully responsive to a model application feasibility analysis, the study would have to generate recommendations for the development of an information system capable of supporting model requirements.
- 1.6 In addition, model feasibility testing would have to be conducted on a local level where data not readily available could be extracted from local records with minimum difficulty.
- 1.7 Thus, from the Phase I development of tentative models and the Phase II exposure to the practicalities of application, the objectives, activities and conclusions contained in this Phase III Report were evolved.

PURPOSE OF THE REPORT

- 1.8 The purpose of this report is to present the findings, conclusions, procedures, and data which were developed during the conduct of the Phase III portion of the Study of the Need for Educational Manpower for Handicapped Children and Youth. It includes:
 - a. The results of the Manpower Requirements Projection Model demonstration and validation test
 - A description of the procedures used in preparing for and conducting the state-by-state survey
 - c. A summary of state survey findings regarding special education characteristics as they affect the flow of information required for MRPM application and agency administration
 - d. MRPM application guidance for the non-technically oriented user, and detailed model explanation and system documentation



e. Individual state reports containing an information flow analysis, an evaluation of data element availability and the processing potential, recommendations for the development of MRPM data element requirements, and an assessment of the resources required to implement an information system that will support the model.

ORGANIZATION OF THE REPORT

- 1.9 The total report is organized into four specific segments the Phase III Report proper (Part A) with two appendices, two User's Guides (Parts B and C), and the State Analysis Reports (Part D). Each of these segments is described briefly as follows:
- 1.10 Part A, the Phase III Final Report, contains in Section II a review of the study objectives and in Section III a discussion of the constraints which established the level of the study, the analytical detail, and the quality and quantity of the data collected. Section IV summarizes the information that was obtained while accomplishing the study objectives and presents the conclusions derived from an analysis of these findings. The objectives, procedures for accomplishment, and results of each of the proposed tasks are discussed in Section V. Section VI suggests further recommended action.
- 1.11 Supplementing Part A are two appendices:

Appendix 1, State Data Summaries, contains the current special education enrollment and personnel data which was collectable during the survey.

Appendix 2, Information Flow Implementation and Maintenance Cost Estimates, contains, for each state, an estimate of the expenditures necessary to implement and maintain an information flow that would provide the data necessary for model application.

- 1.12 Part B, Special Education Staff MRPM User's Guide, contains model application guidance for those who would be responsible for the flow and accumulation of data necessary for model application but who do not necessarily desire to review the technical explanations of model mathematics or computer program documentation.
- 1.13 Part C, Manpower Requirements Projection Model Technical Documentation of the Computer Program, contains an explanation of the mathematical expressions used in the model as well as the computer program documentation.
- 1.14 Part D, State Analysis Reports, contains the survey study reports for each of the 50 states.

II. PHASE III STUDY OBJECTIVES

INTRODUCTION

2.1 As a result of the findings in the earlier phases of this study, it was determined that the information necessary to utilize the Manpower Requirements Projection Model was, in general, not presently available at the state special education level. Therefore, the potential for successful implementation of the model was greatly dependent upon the flow of basic special education information within each state. In addition, the capabilities and motivation of the special education staff, and the availability of computer hardware would have a bearing on model implementation potential. The recognition of these constraints led to the determination of the objectives and the tasks for Phase III.

SPECIFIED OBJECTIVES

- 2.2 The broad objective of Phase III was to lay the groundwork in each state for producing the flow of data necessary for the initial implementation and continued application of the MRPM. The Phase III proposal broke this overall objective into three specified sub-objectives.
- 2.3 One sub-objective was to specify for each state an information flow and related procedures that would facilitate the continued collection and reporting of data necessary for MRPM utilization.
- 2.4 A second sub-objective was to identify the extent of assistance each state would require to both implement and maintain the information flow.
- 2.5 The third sub-objective was to point out to each state the uses and applications of the MRPM so as to motivate each state to collect the data, utilize the model's capabilities, analyze the results, and apply the information in its planning and management.



ADDITIONAL REQUIREMENTS

2.6 In addition to the foregoing specified sub-objectives, there were two additional major requirements implicit in the task content. First, it was necessary to demonstrate the model application feasibility and information validity, for until this was done, achievement of the other objectives remained academic. Second, it was necessary to collect in each state where available, data which could be used to estimate present special education manpower requirements.

ACCOMPLISHMENT OF OBJECTIVES

2.7 Each of the objectives and requirements was successfully fulfilled to the degree possible within the limitations imposed by time, funds, and data availability. The results of these accomplishments are presented in Section IV, Findings and Conclusions.



III. LIMITATIONS

INTRODUCTION

3.1 During the course of the study certain factors hindered or curtailed accomplishment of some of the study objectives. Certain limitations were inherent in the study plan, which was based on an established time frame and the visit of one survey analyst to each state; others resulted from circumstances to be expected when conducting a study as involved with state organizations, personnel, and varieties of data as was this 50-state survey.

LIMITATIONS

- 3.2 The principal limitations encountered while conducting the survey were in
 - a. The availability of the required type of data at the state level
 - b. The complexity of state organizational responsibility for the education of handicapped children
 - c. The availability of state personnel during the time frame of the visit
 - d. The length of time available to visit each state.
- 3.3 Limitations in these areas varied in occurrence and in individual and cumulative effect from state to state, depending upon the combination of circumstances existing at the time of the visit.

TO THE STATE OF TH

Availability of Data at the State Level

- 3.4 The availability of data at the necessary level of detail within each state agency had a direct effect on the data collection task and an indirect effect on the performance of the other survey duties. Incomplete data collection occurred in some instances because of total non-availability of certain data, over-aggregation of data (for example, total enrollment by handicapping condition but no breakdown by education level or educational program type), or only partial availability of data (e.g., data available from the public school system but not from the state institutions). When these conditions existed, there was frequently no way, within the available time, of obtaining the depth of detail desired.
- 3.5 An undesirable effect could also occur, however, when extremely detailed data, such as individual classroom records or teacher's reports, were the only source of data available. Frequently the state agency staff was too limited to provide much assistance in the aggregation of the data, and if the analyst spent too much of his limited time aggregating data, he might not be able to pursue the other objectives of his visit. A trade-off might have to be effected at the expense of the collection of data. Any of the foregoing conditions could be the cause of missing or incomplete data, and where the data were incomplete, the current manpower requirements estimates could not be made.

Complexity of Handicapped Child Education Responsibilities

3.6 The responsibility for the education of handicapped children is rarely confined to the state special education agency. In some states the responsibility is shared by only one or two other state level agencies and the division of responsibility is clearly defined. Even this small amount of subdivision occasionally required the survey analyst to conduct multiple interviews and data collection efforts. However, the most difficulty was encountered when responsibility overlapped and there were a number of agencies involved. Then scheduling interviews, visiting different sites, and orienting each new interviewee could consume much valuable time. Every effort was made to assemble the responsible personnel in one meeting whenever possible; nevertheless, the more complex the handicap child education responsibility in the state, the greater the difficulty in accomplishing all of the survey objectives within the allotted time.

Availability of State Personnel

3.7 Another important problem arose when state agency personnel, because of their busy schedules, could not be available during the state visit for as much time as was needed. This condition was most critical in states having small staffs, where one staff member might be the sole authority in particular areas of specialization. This is not to be interpreted as a lack of cooperation. In fact, the cooperation exhibited by almost all of the state agency personnel was outstanding.



Length of Time for the State Visit

3.8 Both because of the time frame for performance of the survey and because of the amount of state personnel time consumed, each state survey visit was limited to 3-5 days. While adequate for most visits, this period was insufficient in a number of cases, for reasons already cited in this section; data elements could not be collected and data reliability could not be verified in the time available.

CONCLUSION

3.9 Whenever the aforementioned limitations did threaten to affect the accomplishment of some of the study objectives, priority was placed on the accomplishment of those objectives which would contribute most toward the implementation of an information flow that would provide the necessary data for model utilization. Despite the fact that the collection of data to be used for the estimation of current manpower requirements was at times restricted, it is felt that all study objectives were successfully achieved.



IV. FINDINGS AND CONCLUSIONS

INTRODUCTION

4.1 This section presents the findings and conclusions resulting from the tasks performed in the accomplishment of Phase III objectives. The work in this phase was divided into two major undertakings: (1) the demonstration and validation of the Manpower Requirements Projection Model, and (2) the state survey to collect data, develop information flow procedures, evaluate staff and hardware capabilities, and encourage model implementation. The degree to which the study was successful in attaining its objectives is discussed in the following paragraphs.

MODEL DEMONSTRATION AND VALIDATION

- 4.2 When it became apparent that the data necessary to demonstrate the the model would not be available at the state level, it was decided to simulate a state condition by substituting a large special school district, where all the data elements could be collected and input into the model for purposes of testing and validation.
- 4.3 The strategy of the test was to collect data from historic files for the required data elements, input them into the model, make manpower projections, and compare them with the actual employment records to determine the validity of the projections. This process utilized historical data records covering a 4-year span. Further details as to the methodology employed in conducting the test are contained in the Section V discussion of Task 3.
- 4.4 The model demonstration proved that collection of the data required by the model is feasible and that when the data is used as input, the computer programs are operational. The mathematical relationships established within the



model are valid as evidenced by the contents of Table 1, which illustrates the close comparison between requirements projected by the model and actual man-power requirements by personnel type for the 1968-1969 school year in a midwestern special school district.

4.5 It should be noted that the longer a special education program has been operating, the more stable will be its associated yearly data. Each year that data is collected and the model is utilized, the data will improve in reliability (with reasonable stability attained in four to five years) and the model results will be more valid.

SURVEY FINDINGS

- 4.6 In surveying the 50 states a great variety was found in those administrative facets of handicapped child education which affect the flow and utilization of special education information. The variables that were found to affect the model application potential are listed below and are discussed individually in subsequent paragraphs.
 - Distribution of responsibility for the education of handicapped children
 - Types of state special education organizations
 - Type and detail level of the data available at the state special education agencies
 - Need for additional special education data
 - Attitude toward model application
 - Legislative, geographic and fiscal factors
 - Existing information flow characteristics
 - Availability of model data elements
 - Availability of resources for model application.

Distribution of Responsibility for the Education of Handicapped Children

4.7 Responsibility for the education of handicapped children almost never belongs to one state agency alone. Other state agencies besides the education departments have a portion of the responsibility. Most frequently involved are the departments of public health, mental health, and social welfare, and autonomous state institutions. Guidelines generally exist for the assignment of a child to any one of the services, but they are not always well-defined.



TABLE 1

では、100mmので

Taxabana (

DEMONSTRATION OF VALIDITY OF PROJECTIONS MADE BY THE MANPOWER REQUIREMENTS PROJECTION MODEL

Comparison of 1968-69 Manpower Requirements - Projected vs Actual

Description of the control of the co	Manı Require	Manpower Requirements	Perconnel Type	Manpower Requirements	ver ients
reisonnei 17pe	Projected By Model	Actual		Projected By Model	Actual
Teacher of TMR - Elementary	14.52	15	Aide for OH - Secondary	1.46	ო
Teacher of TMR - Secondary	10.42	10	Physical Therapist for OH -	i i	
Aide for TMK	13.05	13	Elementary	2.73	2.9
Teacher of EMR - Elementary	75.19	77	Physical Therapist for OH – Secondary	.50	9.
PE Teacher of EMR - Elementary	1.23	က	Occupational Therapist for OH -		
Language Development Teacher of	œ	σ	Elementary	3.25	3.3
Speech Therapist - EMR - Elementary	2.39	7.5	Occupational Therapist for OH - Secondary	.27	.2
Teacher of EMR-SI - Elementary	5.96	9	Teacher of VH - Elementary	3.01	က
Assistant for EMR-SI - Elementary	2.86	ო	Teacher of VH - Secondary	2.32	en
Teacher of EMR - Secondary	50.15	20	Teacher for Special Learning	91 6	ď
Driver Education Teacher of EMR -	1.00		Assistant for Special Learning		
Vocational Home Economics Teacher			Disabilities	2.58	ю
of EMR - Secondary	1.74	2	Social Worker - SLD	66.	
PE Teacher of EMR – Secondary	1.22	8	Teacher of the Deaf - Preschool	3.59	9
Industrial Education Teacher of			Teacher of the Deaf - Elementary	11.70	11
EMR - Secondary	1.76	7	Assistant for Deaf - Preschool	1.78	က
Teacher of OH - Elementary	11.99	12	Assistant for Deaf - Flementary	4.34	4
Teacher of OH – Secondary	3.29	വ	Teacher of Deaf - Secondary	1.68	7
Aide for OH - Elementary	9.02	თ	Hearing Clinician - Elementary	7.29	7
			Hearing Clinician - Secondary	1.82	2
SI - Special Instruction OH - Orthopedically Handicapped	edically Ha	ndicapped	VH - Visually Handicapped SLD - S	Special Learning Disability	βį

4.8 The reasons for the dispersion of responsibility include:

- Jurisdictional assignments which might occur when services for a handicapping condition are provided by several sources (e.g., state institutions, local public schools, or other state agencies) - For instance, a blind child residing in a district providing no public school special education program for that handicap may be assigned to a state institution for the blind, whereas a child residing in a district where such a public school program is available may not be eligible for institutional services. On the other hand, a vocational rehabilitation department may have programs for training educable mentally retarded children for a vocation in a district where there are also public school special education programs for the same age range. The point at which the responsibility passes from one agency to another may be nebulous.
- Functional assignments established by the organization b. of state services — This type of responsibility dispersion may arise, for example, in an area where a mental health agency exists and responsibility for the education of children with certain forms of mental handicap is included in its functional charter. In some instances a state agency was established to service a particular handicapping condition recognized at the time of its charter. Since its establishment, new services have become available, but responsibility for them has been assigned to a different agency. Because of historical involvement in state legislative and organizational structures, the original agency continues its function, and dispersion of responsibility is maintained. This kind of situation most frequently occurs in the area of education of the mentally retarded.
- c. Specialization capabilities in a particular handicap area, such as public institutions for the blind or the deaf.
- d. The existence of private educational services While private organizations have no legislated responsibilities, they are an additional source of special education for handicapped children. Some states provide tuition payment and rely upon specialized private facilities to serve certain types of handicapped children. In some cases, private institutions are a means of circumventing legislative fiscal constraints.



4.9 There are additional variations in the reasons for the fractionalization of educational services to handicapped children, but, for the purposes of this study, the reasons are only important because of their effect on the special education information flow and the use of the Manpower Requirements Projection Model. Each additional agency, autonomous institution, and private facility adds to the complexity of establishing data collection procedures and data consistency. Another factor which arises indirectly from this fractionalization is that in many states the personnel qualifications for teaching handicapped children vary from agency to agency, state school to state school, and of course, from one private school to another.

Types of State Special Education Organizations

- 4.10 The organizational hierarchy and function of the individual state special education agencies has an important bearing on the information flow. The state special education agency almost always serves the state's public school system and has additional responsibilities in other areas (e.g., state schools and institutions, private facilities), depending upon individual state legislation. Organizationally, the agency is contained within the state department of education (or public instruction, etc.), but its level within the state department varies considerably. In some states, the director of special education is directly responsible to the superintendent of education (or his equivalent) and in other states he may be several levels removed.
- 4.11 The special education intra-agency organizations also exhibit a variety of structures. In some states, particularly where the staff is very small, each staff member, although primarily responsible for a specific portion of the whole job content, can "fill in" to perform other special education duties. In such cases, communications and information flow within the agency are good. The other extreme involves complex agencies where there is a specialist for each handicap condition and coordination among staff members, even to the request of data from the locals, is minimal or nonexistent. This causes variations in the level of data detail available at the state agency, to say nothing of the deluge of information requests that can be imposed upon the local school districts.
- 4.12 The functions of the special education agency also vary widely from state to state. The range of legislated responsibilities runs the length of the spectrum from practically no responsibility to rather complete control of the state's education effort for handicapped children. Agencies may
 - a. Oversee distribution of funds, exercising only enough control to obtain information upon which to base fund disbursements.
 - b. Provide guidance to local education agencies for the formulation and development of special education programs — This entails more involvement at the local level and a better knowledge of local procedures, definitions, and facilities.



- c. Enforce state special education regulations pertaining to diagnosis and establishment of classes, approval of curricular content, teacher approval, individual child applicant approval — This may also include provision for coordination with other state agencies and private facilities involved in the education of the handicapped.
- 4.13 Insofar as the model is concerned, the organizational structure is important only in that it reflects on the ability of the special education staff to influence the data from the public schools and other state agencies and private facilities.
- 4.14 The functions for which the special education agency is responsible correlate rather well with the information that is made available to them. The study findings indicated that the more involvement the state staff has with the local agencies, the better is their "leverage" for requesting, and obtaining data.

Level of Data Available at State Special Education Agencies

- 4.15 One of the first tasks performed in the analysis of each state's information flow system was to determine the level of detail available at the state level for the data elements required by the model. During the course of the survey, analysis revealed a variety of levels, both within and among special education agencies. Frequently, the functional responsibility of the special education agency was found to dictate the level of data available, since little more than the data required by the agency is collected or aggregated.
- 4.16 The following descriptions of types of information collected indicate the various levels of available data:
 - a. Sufficient to support financial disbursement only This is generally very aggregated local education data which reflects the basis used for fund allocation, for example, the total number of children served, by handicapping condition.
 - b. Sufficient only to satisfy the requirements to qualify for Federal assistance such as the Title VI-A Plan — In this respect, the Federal accounting requirements become a prime motivator for developing information flow.
 - c. Sufficient to satisfy the specific needs of only a portion of the special education programs — With decentralized intradepartmental collection procedures similar data, applicable to all handicaps, is not collected; detailed data becomes available only for the specific programs polled.



- d. Sufficient for a specific purpose, possibly to reinforce some request to the legislature — This kind of data, contained in non-routine reports (special one-time surveys), is allowed to become obsolete until there is need to initiate another special survey. Occasionally these non-routine reports were found to contain the level of detail required for model application, but the data was either obsolete or the mechanism for continued collection of the data was nonexistent.
- e. Sufficient for projections, based upon a state's individual model Projection data was found to be available in varying degrees of accuracy for numerous different subjects including child populations, special handicap conditions, special education manpower requirements, pupil enrollments, etc. Although the rationale for many of these projections does not provide for all of the elements that would affect the projections, the fact that some states are making an effort to anticipate their problems and plan for their solution is encouraging, since it is likely to increase the desire and need for the Manpower Requirements Projection Model.
- f. Sufficient to provide statistics for annual reports detailing the accomplishments of special education for the previous year Many of the state special education agencies have elements of information flowing to them that describe the status of services. In some states, the level of detail approximates the requirements of the MRPM, and with modification, could be the basis for the necessary information flow.
- 4.17 In summary, it was found that although the current level of data detail at the state level could not support the model, in many cases only minor modifications to an already existing information flow would be required to provide data sufficient for initial model implementation.

Need for Additional Special Education Data_

4.18 In many of the states visited, it was found that the information available to the special education staff was inadequate for their requirements, even without consideration of the MRPM. In almost every state it was readily admitted by the directors of special education that there are elements of data which would be very

useful to them, but which for various reasons they do not now collect. The reasons for this information shortage include:

- a. Insufficient funds
- b. No authority to collect data from LEA or other agencies
- c. Lack of staff for processing and analysis purposes
- d. Need for guidance in setting up data collection procedures.
- 4.19 Additional data is needed by many of the state special education agencies to document services provided, to analyze the status and effectiveness of services, and to plan for both the existing level of activity and model application. The requirement for data collection for model application purposes could provide the impetus to initiate improved data collection procedures in many states.

Attitude Toward Model Application

- 4.20 All of the 50 state special education agencies cooperated completely with the analysts conducting the survey. After the analyst explained and discussed the model application objectives, data element requirements, and the existing information flow with the special education director (and in many cases, with officials of other affected agencies), the attitude of the state personnel toward the Manpower Requirements Projection Model was evaluated.
- 4.21 In most cases, the directors were primarily intrigued by the potential for additional data which might become available to them. They did not always agree that all of the specified data elements were necessary or applicable to their particular situation, but they did feel that the basic elements would, for the most part, be useful for operational analysis. Where the full concept of the model potential was well understood (as was generally the case), a definite interest in utilization of the model was exhibited. However, the actual availability of the model and suggestions as to how it may be implemented will help the directors to evaluate model capabilities and decide whether to use them.
- 4.22 In a few instances, the current gap between manpower supply and requirements is so great that the need for projecting requirements is too distant a problem. In such cases, the directors considered model application to be an academic exercise. When this condition obviously existed the survey analyst concentrated primarily on developing an interest in creating an information flow to provide the necessary data for the future, when manpower requirements projection would prove to be a practical planning aid.

Legislative, Geographic, and Fiscal Factors

4.23 Among the set of variables that affect model application is a group of conditions that reflect each state's unique characteristics. The effect of each of these conditions on the complexity of the information flow, and hence on the model application, varies from state to state.



- Handicap Definitions. Each state applies its own definitions to the handicapping conditions. These definitions are the basis for diganostic classification and determine the type of service the child will receive. Even the definitions of the basic handicap groups may vary from state to state. In some states, the deaf and hard of hearing are grouped in the "hearing impaired" category; while in other states the hard of hearing may be included in a "speech and hearing" category (which excludes the deaf). The definitions are statistically important because they define which children are served by a specific type of special education program; this in turn affects the special education personnel requirements.
- 4.25 <u>Handicapped Areas Served</u>. This set of variable refers to the handicapping conditions served and the educational programs available to serve them. A child with a handicapping condition may receive his education in a state residential school, a public school special education class, a special day school, a resource room, or by an itinerant teaching program, depending upon the special education policies of the state. Which programs a state utilizes may affect the manpower requirements because teacher/pupil contact ratios may vary from program to program by handicapping conditions served.
- 4.26 <u>Fiscal Attitude Toward Special Education</u>. The state agencies are in competition with each other for the allocation of the available state funds. It is not unusual to have a state's special education budget controlled not by the services needed but by some fund distribution formula that gives special education its "piece of the pie." This of course reflects on manpower requirements projections because it introduces another dimension into the overall problem of satisfying these requirements. Here, however, good information and projections can be most useful by presenting factual evidence to support service requirement claims.
- Mandatory Legislation. This type of legislation serves at cross purposes. Its objective is to ensure education services to the handicapped by specifying that when a community has a certain number of children requiring special education, it must arrange to provide it. This intent is good; however, too frequently the funds are not available at the local level to provide the needed services and the local agencies avoid identifying handicapped children, to circumvent the legislation. This slows the diagnostic process and seriously distorts the true measure of annual incidence. In states where mandatory legislation exists without the funds to serve each identified child, some consideration should be given to permit diagnosis and identification without forcing the community into a financial commitment it cannot meet. In addition to distorting incidence, under mandatory legislation it is difficult to get a true measure of the handicapped child population, and thus, of special education requirements of a state.
- 4.28 <u>Local vs State Sponsorship</u>. This characteristic becomes important when local sponsorship of services deprives the state of any flow of information pertaining to special education efforts. In some states, special education programs must receive the approval of the state agency regardless of the source

of sponsorship, while other states pride themselves on the local autonomy of their special education programs. The net effect of this characteristic is really dependent upon the communication that is permitted to exist between local and state levels.

- 4.29 <u>Population Density/Dispersion</u>. In some states there are areas so sparsely populated, and the geographic distances between even small population centers are so great, that regular education service poses a problem, to say nothing of special education. In such areas handicapped children either receive no services or the services of a regular education teacher who, if the child is fortunate, will have had at least some special education training or guidance. These problems must be considered when making manpower projections. In the first place, normal teacher/pupil contact ratios cannot apply because of the low possibility of finding enough children with the same handicap condition for even a minimum sized class within a feasible transportation range. In addition, there is difficulty in attracting qualified personnel to such remote areas.
- Manpower Availability. The availability of qualified special education personnel is affected by several considerations, not the least of which is money. One state may have little difficulty in obtaining qualified teachers because of a good pay scale, while a neighboring state offering lower pay "goes abegging." An understaffed state may have good university training programs but lose its potential manpower because of salary limitations. The wide variation in teacher training requirements and certification is another factor affecting manpower acquisition. Other factors such as the special education "atmosphere" in a state or locality, and the previously mentioned geographic dispersion problem have an influence upon special education manpower.

Existing Information Flow Characteristics

- 4.31 The 50-state survey revealed a variety of characteristics that are found in state information systems. The combination of data elements into a system was often not the result of a preconceived information system design, but was, rather, the result of building on information already available, or the cumulative result of special information requirements.
- 4.32 Type of System. Obviously, the information available at a state special education agency will either be derived specifically for special education use or extracted from a system designed for other users. The survey indicated that if the information is of the former type, its level of detail is likely to approximate that required by the MRPM. However, data extracted from a system used primarily for other purposes (e.g., a regular education information system) is generally too highly aggregated for model use. This is not meant to imply that special education information could not be compatible with another system or, for that matter, be a subsystem of another system. It does mean, however, that the system from which special education information is successfully extracted must provide for those data elements unique to special education requirements.



- 4.33 A pupil accounting system (PAS) that is designed for the state's overall education system can be fully responsive to special education needs if it also provides the additional special education data elements. A data summary system (wherein detailed data is collected at the LEA, but the LEA summarizes the data before transmittal to state level) can also satisfy model requirements if summarization is by the required categories.
- 4.34 Of course, the condition was also found wherein the available data was not derived by any systematic method, but was assembled through unofficial informal channels. This type of data was generally incomplete in that all sources were not tapped and the methodology for repeating the data collection process was not established.
- 4.35 In summary, it was found that a small number of states (five or six) had, or were in the process of developing, information systems that were sophisticated enough to integrate both general education and special education information requirements. By far, the greatest majority of existing special education information systems are the result of the special education agency striving to collect that data which it needs to operate, and in many cases the results are minimal. These systems are characterized by a lack of cohesiveness in the data collection process and in data reduction. Often vital elements are missing which are required to make the existing data meaningful. There are a small number of states that essentially have no special education data other than that needed for financial allocations.
- 4.36 <u>Basic Flow Patterns</u>. The reporting flow patterns vary according to policies existing in each state. Possible general flow paths are:
 - Classroom to LEA to state level, with summarization at state level
 - Classroom to state level, with summarization at state level
 - c. Classroom to LEA, with summarization at the LEA and transmittal of the summaries to state level.
- 4.37 The initial source of enrollment data elements (enrollments, attritions, transfers) is generally classroom (or itinerant) teacher reports. In most states enrollment data is first transmitted to the LEA; then a copy is either forwarded to the state level or the LEA aggregates the data from a number of classrooms and forwards it to the state level. In some cases, however, the flow of information is directly from the teacher to the state education agency (SEA).
- 4.38 Data on children identified as handicapped but not enrolled in a program, is usually reported by the LEA when it is available. In some states this data already exists in detailed form at state level because child application approval is at state level.



- 4.39 Personnel data, excluding initial certification, is frequently submitted, by the LEA to the SEA, in special education program or class approval plans. In many instances, however, this basic source of information for determining active teacher personnel is not utilized, with the result that a roster of active personnel is not available at the SEA.
- 4.40 Very rapily is there a formal flow of special education data between state level agencies content between private schools and the state special education agency. One-time flow of data between these sources usually requires a special request (formal or informal), which must be renewed each time the data is needed.
- 4.41 Forms Variations. As might be expected, the variety of forms encountered was all but endless. Variety among states is immaterial, but the variations in reporting formats that occur at all levels within many states certainly contribute to the data preparation work load, to say nothing of negative effect on data consistency. Many states had unique forms for each handicap condition and also employed different reporting procedures for each handicap. The necessity for unique information about each handicapping condition is obvious, but much of the data is also standard. Recognizing this fact, some states have organized their handicap reporting forms so that the portion containing standard data is arranged in the same format on all forms.
- 4.42 It was obvious to the survey staff that the reporting forms used in many states were designed by people inexperienced in the requirements of good forms format. Awkward data arrangements, insufficient space for data insertion, misleading column titles, confusing directions, and repetitious data were some of the more common problems. Rarely had any consideration been given to the ease of data conversion directly from the forms into automated data processing systems. In some states, each handicap specialist is permitted to design and circulate for completion those forms which he deems necessary to the collection of data for his area of specialization. Ironically, much of the data collected by some states is never aggregated or even subjected to individual analysis.
- 4.43 Degree of Automation. Many of the state education agencies are becoming aware of the advantages of using automated data processing techniques in their general education programs. However, the use of automated data processing procedures is frequently not considered by special education agencies. The need for these procedures is often not even recognized, for the agencies are too accustomed to starving for information and making do with the little data they are able to manually assemble. On several occasions the survey analyst, during his visit to the state, established the first communication between the special education agency and the data processing agency charged with the responsibility for providing data processing support.
- 4.44 There is little doubt that the states already utilizing automated processing will most quickly apply the MRPM. Certain states, because of their small populations and paucity of special education programs will be able to manually aggregate data for some time to come. Unfortunately, there may be a correlation between a lack of need for efficient data processing procedures and inadequate special lucation services.

- 4.45 <u>Time Period Variations</u>. The reporting cycles that are in effect in a state are usually linked to the need for providing budgetary data. In most cases this is consistent with the operational data needs of the educational system within the state. Unfortunately, there are occasions when the processing of non-budgetary data is so delayed that it is obsolete before it becomes available.
- 4.46 The establishment of a common time frame for all state to report the findings of the MRPM to BEH is recommended, but the fact that findings may be based upon different time periods must be considered during any analysis of combined results. Changes in the reporting cycle within a state may be constrained by many other governmental procedures that are little related to special education.

Availability of MRPM Data Elements

- 4.47 Full application of the Manpower Requirements Projection Model requires that several categories of data elements by available. These include
 - a. Children identified as needing special education
 - b. Unidentified handicapped child population (estimate)
 - c. Mobility of children into, within, and out of the handicapped child population
 - d. Special education simulation variables
 - e. General child population projections
 - f. Special education personnel supply (optional).

The current availability of the data within these categories, and the potential for data development, are discussed in the following paragraphs. A general comment that applies to all elements is that seldom were data pertaining to the total of handicapped child services available in one set of records or in one data bank. Usually, each agency, autonomous state school, and private school maintained its own records for the children within its jurisdiction.

- 4.48 Children Identified As Needing Special Education. This category is divided into two areas enrolled, and identified and waiting to be enrolled. "Enrolled" refers to the handicapped children who are currently receiving educational services in a recognized special education program. "Identified and waiting to be enrolled" refers to the children who have been diagnosed as needing special educational services, but for some reason are not yet enrolled; this group constitutes the special education waiting list.
- 4.49 The enrolled children are almost always accounted for, in one way or another, at state level. However, to be useable by the MRPM, it is necessary that enrollment data be broken down by age, handicapping condition, and education program. Enrollment data by handicap group was usually available, but further delineation, when it did exist, was generally by education level (elementary, primary, intermediate, secondary, high school, etc.) and not by



individual year of age. This, of course, is not satisfactory for model application because the age mix within the education level of the handicapping condition (target group) is not known. Many states were able to provide totals by handicapping condition and educational program, however, educational programs were not always well-defined. Residential schools and itinerant programs were the easily identifiable extremes but, aside from grouping the children into "special classes in regular schools," other program areas were not too well established for reporting purposes.

- 4.50 Records pertaining to those children identified and waiting to be enrolled were scarce at state level and, when available, were usually uncompiled and incomplete. Some states are making provision for collecting the waiting list data by including it in the information items requested from the LEA.
- 4.51 The establishment of meaningful waiting list data is complicated by several serious problems, one or more of which occur in 80 percent of the states. One of the major problems, and of course a very basic one, is the inability of states to provide the diagnostic services needed to positively identify the conditions of children referred, or in the absence of referral, to seek out and identify the children requiring services. The shortage of funds, qualified diagnostic personnel, and diagnostic facilities prohibit many states from servicing more than those children who have been referred as potentially needing special education services. In fact, it is not unusual to limit diagnosis to the extent necessary to fill existing or near future special education openings.
- 4.52 Another problem complicating the establishment of total waiting list data is the multiplicity of sources for both referrals and diagnoses, and the level of authority to which the findings are reported. Referrals can be made by parents, doctors, teachers, school nurses, welfare and legal agencies, etc. They can be made to school superintendents, to state agencies such as special education, health, mental health, welfare, and to public and private clinics. Some states have established a formal procedure to be followed in the diagnostic process and in such cases it should be possible to assemble data on those children who have been diagnosed and have not received a special education assignment. (It cannot be assumed, however, that such a list is representative of all children requiring services unless diagnosis is not constrained by funds, personnel, or policy). In states where the reporting of referrals and diagnosis is less formal, or where the operations of the LEA are mostly autonomous (resulting in state-wide inconsistency of policy) the potential for collecting useable waiting list data is slight.
- 4.53 Another problem that affects the potential for obtaining waiting list data has been mentioned previously in connection with the variables affecting special education program services. Mandatory legislation that policy which places the responsibility on the LEA to provide each identified child with special education services frequently serves as a restraint to the referral and diagnosis of potentially handicapped children. Referrals are not made, nor are diagnoses



performed unless personnel, facilities, and funds are available. Thus, in a community that may not be able to serve any additional "identified children," no waiting list exists because no children beyond those who can be served have been identified.

- 4.54 The major causes for the lack of "identified but unserved" data have been discussed. For these reasons, such statistics are not often used as a basis for planning for additional special education requirements.
- 4.55 Unidentified Handicapped Child Population. In the absence of comprehensive diagnostic capability, most states use prevalence rates to estimate the number of children in each category of each handicapping condition. Although a few states use rates based on special studies, most states use the national prevalence rates, or modifications of the national rates. These constitute the best available tool for estimating the handicapped child population, although officials frequently feel that some of the rates in the set are not accurate for their particular state.
- 4.56 Handicap census is another technique employed by some states to estimate their unidentified handicap population. Such surveys generally utilize a questionnaire to be completed by personnel not skilled in diagnostic techniques. Regular classroom teachers or other participating personnel are asked to categorize classroom children and/or to visit homes to ask parents about preschool age children who may be handicapped. One problem is that to determine the validity rate of the census, a correlation must be made between these "unskilled diagnoses" or referrals and an actual diagnosis. In addition, too frequently the census is conducted on a one-time or sporadic basis and validation through the accumulation of follow-up statistics becomes difficult.
- 4.57 A few states are pioneering in a census method designed to greatly reduce unqualified diagnostic classification by providing the "census taker" with a series of symptoms (observable indications) which can be applied to a child's behavior without the need for diagnostic categorization by non-professional personnel. The symptoms are then reviewed by qualified personnel who categorize the child. The objective is to provide greater quantities of more accurately based referrals.
- Mobility of Special Education Population. The size of the identified handicapped child population in a state is altered by the addition of new children, including new enrollees and incoming interstate transfers, and by attritions (graduations, dropouts, outgoing interstate transfers, deaths, etc.) which deduct from the total population. The availability of data pertaining to these mobility factors was almost always not satisfactory for MRPM purposes.
- 4.59 Data on new enrollees and incoming interstate transfers was usually not available at the same level of detail as were enrollment data.

- 4.60 Records on newly diagnosed children, where diagnosis was tantamount to enrollment (diagnosis only when capacity was available), were usually available by age and handicapping condition at state level if enrollment data were reported on each individual student. The date of enrollment is frequently a part of the reporting record. This information is almost certainly known at each LEA; however, where the newly diagnosed children are not immediately enrolled, the availability of the information is on a par with the waiting list data previously discussed.
- 4.61 Attrition data by handicapping condition does appear in many state special education records. However, a breakdown by cause of attrition appears less frequently, and attrition by single year of age was almost never available. Most states recognized the utility of such data and, as a result, this will be one of the easier data elements for which to develop collection procedures. Only a minimal modification to existing systems will be required.
- 4.62 Special Education Simulation Variables. To fully utilize the simulative capabilities of the model, certain types of background data are required. Educational program mix trends are one of the data elements useful in the projection of manpower requirements because their variation can affect manpower requirements. Many states had enrollment data by handicapping condition and education program (residential, special day school, special class in a regular school, itinerant, etc.), but, as previously discussed, the program breakdown frequently included only three divisions residential, itinerant, and the area in between these two. The state survey indicated that historical records will usually contain sufficient data to enable special education consultants or staff to plot an interpretation of trends in program mix.
- 4.63 Other simulative data elements include personnel types and personnel/pupil contact ratios. The model requires that these categories of data be available by target group (subsets of the handicapped population having major distinguishable special education personnel requirements). Almost all states required that direct contact personnel have some special qualifications to serve handicapped children and most of these states required that the qualifications be unique to the handicap area in which the personnel were to serve. Thus, the identification of a teacher of the blind, a teacher of the mentally retarded, a speech and hearing therapist, etc. was generally possible through available data. However, few states required a specific qualification by education level (elementary, secondary, primary, intermediate, etc.).
- 4.64 Personnel/pupil contact ratios for a state's public school system are almost always specified by state legislation, or department of education or special education agency directives. These ratios usually were found to vary according to the requirements of a handicap group, but, most frequently, there was no variation in the ratio within the handicap group because of education program (except for itinerant caseload ratios) or educational level. There were some



states that specified only one personnel/pupil contact ratio for all handicap conditions. Whatever the personnel/pupil contact ratio, it was always obtained easily insofar as the public school systems were concerned. In most instances, these ratios were not formally documented for state institutions or private schools. Each institution or private school usually had its own ratios which could vary radically according to the nature of services provided and the educational policies in effect.

- 4.65 Yearly Projections of General Child Population, By Age. Many states had population projections or statistics that could be utilized in the preparation of annual population projections by single year of age, for the period for which the projections were desired. The basis for the derivation of these projections included
 - Historical records by grade level
 - General population trend predictions
 - Time increments (1970-1975-1980-etc.), by age blocks (0-5, 6-10, 11-15, etc.).

This information was not generally available as part of special education data, but was available from various state level agencies responsible for statistical analysis (financial offices, planning offices, etc.).

4.66 Special Education Personnel Supply. Although this data is not necessary to the projection of manpower requirements, it would be necessary if a state wished to determine the gap between current manpower supply and requirements. This type of information is frequently obtained from individual forms and compiled for distribution as a special education personnel directory. The basic data was usually found to be available within the state special education office, and although it was rarely summarized and totaled by area of specialization, summarization was not too difficult.

Availability of Data Processing Resources

- 4.67 The resources necessary for the implementation and application of the Manpower Requirements Projection Model include both manpower skills and data processing hardware capability. The availability and adequacy of both varied widely among the 50 states. Existing levels of sophistication in information systems and organizational interfaces between education and data processing groups also varied from one state to another.
- 4.68 <u>Manpower</u>. To implement the information flow necessary to support the MRPM, several different types of manpower capability are required to perform the necessary functions of system design, data source determination, form design, input data preparation, programming, output format design, coordination, and output analysis. Talent of this nature was rarely found within the capability of the existing special education staffs because these skills are not indigenous

to normal special education operations. In almost every state, however, there exists within the state government an organization which is theoretically responsible for providing special education with the type of technical support necessary to initiate and maintain an information flow. In practically all cases where such an organization does exist, it contains the type of personnel skills necessary to the implementation of an information flow and the application of the model. However, this organization may or may not be able to provide such services depending upon present work load, staff size, and priority of work. In many states, special education agencies receive few services as a direct result of their own requirements. (Frequently the services obtained are an offshoot of some other reporting requirement.) Generally, in those states where an information system responsive to special education needs did not exist, either the request for such services had never been made, the special education staff did not know how to formulate its data needs, or there was a lack of understanding or appreciation of what could be accomplished using such services. This is not too surprising since special education personnel are, by nature or profession, primarily "peopleoriented" rather than "systems-oriented."

- 4.69 Some of the manpower skills required, such as systems coordination and data output analysis are very much a part of the capabilities that special education staffs should possess (and in most cases do possess). However, the unavailability of the necessary staff for additional data development efforts was characteristic of the understaffed status of many special education agencies.
- 4.70 In summary, the personnel required to initiate and maintain the information flow were usually available, although the personnel for application to the tasks necessary to accomplish the flow was very frequently in short supply.
- 4.71 <u>Hardware</u>. The computer hardware capacity that is required falls into two categories: capacity to process an information system, and capacity to process the Manpower Requirements Projection Model.
- 4.72 Most state education agencies theoretically had the hardware capability, or access to it through other agencies or universities, to process an information system. However, the special education agency's actual access was frequently limited because of lack of machine availability, often the result of the low priority that was assigned to special education processing needs. This actual limited access is evidenced by the fact that, at the time of the survey, approximately a third of the state special education agencies were utilizing automated data processing techniques in their own information flow. Since the survey visits, a few states have begun using an automated system for the first time.
- 4.73 The hardware capability requirements for the model generally exceed those of an information system primarily because of the need for approximately 24-thousand word storage capacity. Even so, sufficient computer capability to run the MRPM program was present, if not always available, in over 80 percent of the states. Only six or seven states did not have a FORTRAN compiler, required by the MRPM computer program.



SURVEY CONCLUSIONS

- 4.74 After completing the state visits, the survey staff prepared individual state analysis reports. These reports contain an evaluation of the data element availability, MRPM implementation resource requirements, and recommendations for effecting an information flow that would support MRPM application. The individual state analysis reports are contained in Part D, State Analysis Reports.
- 4.75 The summarized conclusions resulting from the analysis of all the individual state reports are contained in the following paragraphs. Not every conclusion applies to every state; rather, these conclusions present a broad overview of the status of special education information systems across the 50 states.

Status of Special Education Information Flow at State Levels

- 4.76 Few states have special education information systems that are capable of providing management type information, that is, data that has predictive as well as evaluative applicability. The need for additional data to document services provided, analyze program status and effectiveness, and provide a base for predictive planning is quite evident. A major upgrading of the information flows within almost all states is indicated. To accomplish this objective, changes will have to be made by the states major in some, and relatively minor in others.
- 4.77 The basic modification that applies to the majority of states is a change in thinking as to what purpose information can serve, and what must be done to obtain the necessary information. Many of the state special education agencies accept what data they have available to them and manipulate it into some sort of status report to the legislature and the public. There is an admission that more information could be useful to them in the management of operations, but many special educators are not skilled in the techniques of information system development. Data flow development often takes a low priority compared to education program development.
- 4.78 The first step in upgrading the information available to special education administrators is to provide the agencies with an understanding of what types of information can be made available, how to obtain it, and how to use it. The state survey conducted in conjunction with the Phase III effort has already accomplished this to an extent at least 12 states have undertaken some modification of their information requirements as a direct result of discussions on Manpower Requirements Projection Model data needs. This does not necessarily mean that these states are going to immediately adopt the MRFM for their use, but they have recognized the utility of many of the data elements for management of their present operations.
- 4.79 Another major requirement for the improvement of information flow and data reliability is acceptance by special education agencies, both at state and local levels, of the fact that each data source and each data element is an



integral part of the overall system. Increased data availability need not always require increased work in data collection. Frequently, coordinated and systematic data collection will require no increase in effort while yielding much additional information.

- 4.80 As previously mentioned, approximately one-third of the states are currently using automated data processing (ADP) techniques in the handling of their data. While there may be a few states that can rationalize their non-use of these techniques because of a small handicapped child population and/or the low volume of services that they can offer, the vast majority of states cannot easily obtain the information they need without benefit of ADP techniques. The manual operations are too time consuming for an already understaffed agency.
- 4.81 In very few of the states is the data pertaining to handicapped children inclusive of all of the sources of handicapped child education — public schools, state schools and institutions, and private facilities. Usually, each agency maintains its own records. While is is possible for a state special education agency to develop an information system that will contain the data pertinent to the areas of its own responsibility, this does not necessarily result in a total handicapped child data base. Such limited information would defeat the objective of the MRPM to project special education manpower requirements for the state's total handicapped child population. The reasons for the distribution within a state of responsibility for the education of handicapped children are not relevant to this study. It must be stressed, however, that interagency cooperation and communication are absolutely essential to the establishment of a common handicapped child data base that will be representative of the state's total service requirements and responsive to each agency's information needs. Further, in some states the special education agency's internal coordination and communication must be strengthened. Standardization of forms, data elements, data collection cycles, and timetables are all prerequisites to internal data flow stabilization.
- 4.82 Liaison between state level and local level special education personnel is also essential to the establishment of an information flow. In most states where state special education agency activity is confined to financial disbursements or where there is very little professional involvement, the information flow is minimal and often inadequate. Conversely, the greater the involvement of the state agency with the local agency, the better the information flow is likely to be. A corollary benefit to greater involvement is the improved capability of state personnel to analyze and utilize the information collected.
- 4.83 Although computer availability is a problem in many states, the relatively limited application of automated data processing (ADP) techniques to the special education information systems is more the result of a combination of other constraints. The lack of appreciation for the potential availability of additional



information through the application of ADP, and a limited understanding of how to initiate and apply ADP techniques, are important obstacles to automating special education data processing.

4.84 The impetus to improve the information flow must come from within the special education agency. Additional leverage may be required to obtain the cooperation of the LEA and other state and private agencies. One of the first actions that must be taken is the application for priorities to obtain the services of ADP technical personnel for system design and for computer usage.

Degree of Federal Involvement

- 4.85 The requirement to respond to Federal requests for information has been a prime motivator in the development of the existing special education information and further advancement in the quality and quantity of information will require continued Federal influence. Many state agencies need encouragement in the form of incentive and leadership. The MRPM is a form of incentive because, by providing the state agencies with management tools, it can help them to do their jobs better. The Phase III state visits provided initial leadership in many states by laying the ground work for improving the information flow and creating a desire for better data. The impetus that has been gained as a result of this effort should be supplemented and supported by continued Federal sponsorship of programs to assist the states with the development of their information systems.
- 4.86 A word of caution is warranted regarding Federal requests for information from the states. The more automated a state's information system, the quicker it can respond to information requests. However, a change in a data element to meet needs of the requestor can require considerable reprogramming at the state level. For example, in one instance a change in two data elements requested by the U.S. Department of Education caused the modification of 31 computer programs and entailed many man-months of effort. Changes should be thoroughly evaluated in the light of complications that may arise at the state level when responding to the request.

Manpower Requirements Projection Model Application Potential

- 4.87 Among the objectives of the state visit were explanation of data element structure and the purpose of the MRPM, and analysis of the information flow necessary to implement the model. In the process of accomplishing these objectives, it was possible for the survey analyst to evaluate the potential for application of the model.
- 4.88 The first conclusion that can be drawn from these evaluations is that the data elements required to support the MRPM were in themselves viewed as valuable information. It was not regarded as feasible to obtain all of the needed data immediately (meaningful data pertaining to the identified handicapped children not yet receiving special education services was seen as among the most difficult to obtain). Nevertheless, acceptance of the usefulness of the information



required for the MRPM was not diminished by data development problems. It was recognized that some elements will simply require time to be fully implemented.

- 4.89 Further acceptance of the model concept and its potential for application is based upon the utility of various aspects of the model. Because the model has several capabilities, it has an appeal for various types of users and thus has greater potential for application.
- 4.90 As an intermediate output, the model projects state handicapped population. Such projections can have a most immediate impact on fund allocations. Since special education agencies are competing more and more with other state agencies for available funds, appeals for special education funds must be based on statistics of supply and demand as well as on the importance of special education programs in the lives of handicapped children.
- 4.91 Another capability of the model appeals to those who must develop training and hiring plans to ensure an adequate manpower supply. The manpower projection feature of the model makes available relevant information upon which to base manpower budgetary estimates.
- 4.92 A third feature of the model, the capability to simulate changes in the provision of special education services, appeals to those who must evaluate the effect of changes in the educational, technological, or political atmosphere on the special education effort. This capability permits the insertion of representative factors to determine "what happens if" specified conditions occur in a state.
- 4.93 The second conclusion, then, regarding the potential for application of the model is that insofar as the model concept is concerned, implementation should be no problem, other conditions (hardware available and a satisfactory information flow established) permitting.
- 4.94 Assuming acceptance of the model concept, the one major consideration affecting implementation is the availability of an information flow capable of providing the required input. None of the states had data immediately available for satisfactory application of the model, although a few had the necessary collection procedures formulated and could probably implement the MRPM within one or two annual data cycles. The absence of unserved handicapped population data is the greatest drawback to rapid implementation. Most states have some diagnostic programs in effect. Programs are usually administered at the local level and children are enrolled where vacancies exist, but frequently no report of unserved or "waiting list" children is made to the state level. In such cases, a procedure is required for systematically reporting diagnoses of the child population and for placing children on waiting lists when services are unavailable. If individual states can be convinced of the value of implementing the necessary diagnostic reporting procedures, then the model can be partially implemented using initial data, with ever-improving data being received as diagnosis approaches



saturation. Those states (approximately 12) having mandatory legislation which induces an artificial constraint on diagnosis, should consider a means of encouraging identification of handicapped children without creating a firm commitment to provide immediate servaces.

- 4.95 Most of the other data elements can be incorporated in the existing information flows in all but a few of the states, so that data should be available for implementation of the MRPM in from two to three annual data cycles once the decision is made by each state to go forward.
- 4.96 The estimated time frame for application of the MRPM, once the state special education agency has decided to undertake the necessary information flow design/modification and implementation, is summarized in Table 2, Estimated Time Frame For MRPM Implementation. The table also provides an indication of those states currently using automated data processing techniques in their present special education information systems. Those states that have initiated some action to improve their information flow and obtain MRPM data elements as a direct result of the survey visits are also shown.
- 4.97 Hardware availability remains as the last requirement upon which to draw a conclusion. As previously discussed, this is a two-pronged requirement; one requirement is for an information processing computer capability and another is for model application capability. As for the information processing capability required, adequate computers do exist in almost all state agencies although actual availability is scarce in some instances. Wherever possible, special education will have to establish a usage claim in order to be able to use the computer facilities. In most of the cases where the state computer facility cannot handle an additional work load, service can probably be obtained from a state university or procured from a contractor.
- 4.98 Although MRPM application requires greater computer storage capacity than most special education information processing needs, the large majority of states had satisfactory computer capability or access to it. Further, the small amount of time required per application (approximately fifteen minutes) should create no real difficulty in the scheduling of computer use. It is concluded that computer availability should be no serious problem to model implementation.
- 4.99 Based upon analysis of survey findings in all of the states, overall conclusions regarding the MRPM are summarized as follows:
 - The model is much needed.

- The concept has been favorably received.
- Some surmountable problems will be encountered in creating the necessary information flow.

TABLE 2
ESTIMATED TIME FRAME FOR MRPM IMPLEMENTATION

State		Annua	l Data C	ycles		Automated Data Processing	Survey
	1-2	2-3	3-4	4-5	Over 5	Used by Special Education	Initiated Action
Alabama	х						
Alaska		x				x	х
Arizona	1			х			
Arkansas		x					х
California		x				x	
Colorado		х					
Connecticut		х	İ				х
Delaware	х						х
Florida	x					х	х
Georgia	х		i				
Hawaii	х					х	
Idaho					х	x	
Illinois			x				
Indiana	х						
Iowa		х				x	
Kansas		(X				
Kentucky		х				x	}
Louisiana			х				
Maine					х		
Maryland				х			
Massachusetts			х				
Michigan		х				x	
M.nnesota		х				x	
Mississippi		x					х
Missouri				х			

54

TABLE 2 (CONT.)

State		Annual	Data Cyc	les		Automated Data Processing	Survey
	1-2	2-3	3-4	4-5	Over 5	Now in Use	Initiated Action
Montana				l	x		
Nebraska			х				
Nevada					х		
New Hampshire	х			!		x	
New Jersey		х		!		x	x
New Mexico	Х					Х	_
New York		х				х	
North Carolina		х					х
North Dakota		i	x				
Ohio		х				x	
Oklahoma	Х			_	-		
Oregon	j	х					x
Pennsylvania		х					
Rhode Island		х	}			x	x
South Carolina		х					
South Dakota		Х					х
Tennessee				х			l
Texas		х			1	x	
Utah		х					
Vermont			х				
Virginia	х					x	х
Washington	х					x	ļ
West Virginia		х					
Wisconsin	х					x	
Wyoming					Х		
TOTALS	1,2	22	7	4	5	19	12



- There should be no serious constraints pecause of computer capacity limitations.
- Once the implementation decision has been made by the state, the MRPM could be operational in two to three annual data cycles in most states.
- 4.100 Conditions vary from state to state and in some states they may be more conducive to early MRPM implementation than in other states.

Current Implementation Status

4.101 Many of the states have indicated that they are anxious to undertake implementation of the model. As a result of the survey analyst visit, some states have already initiated steps to modify their existing data collection procedures to incorporate the changes necessary to provide the missing data elements. The basic ground work has been laid and the initial impetus provided, but additional Federal follow-up and involvement will be required to maintain an atmosphere of encouragement and cooperation.

Cost Estimates For Information Flow Implementation and Maintenance

- 4.102 The resources (manpower and hardware) necessary to implement and maintain the information flow recommended in each of the state survey analysis reports are detailed in the individual state reports. Appendix 2, Information Flow Implementation and Maintenance Cost Estimates, of this Part A Report contains a series of individual state tables that summarizes the resources and also converts these resources to a cost figure.
- 4.103 The contents of the Appendix 2 tables are summarized in Table 3, Estimated Cost Summary for Special Education Data Development and MRPM Application at State Level. This table contains the minimum and maximum cost estimates for each state for both the implementation and maintenance phases. Where only one system has been recommended the minimum and maximum estimates are the same. When alternative systems have been recommended the minimum and maximum estimates will vary. For details of system recommendation, refer to the individual state tables in Appendix 2 and to the individual state analysis/tables reports in Fart D of the Phase III Report.



TABLE 3
ESTIMATED COST SUMMARY FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MANPOWER REQUIREMENTS PROJECTION MODEL APPLICATION AT STATE LEVEL

State	Design and	Implementation	System Main . (Annual Co	tenanc e st)
	Min Estimate, \$	Max Estimate, \$	Min Estimate,	Max Estimate \$
Alabama	7735	8490	2915	3175
Alaska <u>l</u> /	4820	4820	1665	1665
Arizona	5525	7285	1425	1425
Arkansas	3430	4485	1510	1570
California 1/	8670	8670	3500	3500
Colorado ¹ /	5790	5790	1930	1930
Connecticut	12,105	12,105	5925	5925
Delaware	6315	6315	1660	1660
Florida	4780	4780	1385	1385
Georgia	7680	7680	2096	2096
Hawaii ¹ /	1920	4290	790	1430
Idaho <u>1/2/</u>	3665	3665	945	945
Illinois 1	7160	7160	2260	2260
Indiana 1/	5510	5510	1440	1440
Iowa 1/	6820	6820	2530	2530
Kansas	5005	6775	1960	2050
Kentucky 1	6055	6055	2915	2915
Louisiana $\frac{1}{}$	7665	7665	1610	1610
Maine 2/	3485	3485	985	9 8 5
Maryland	6710	7970	1145	1145
Massachusetts	10,890	15,030	2890	2390
Michigan	4410	5955	1730	1730
Minnesota	6150	6150	2235	2235
Mississippi	8208	8208	1682	1682
Missouri	5495	8020	1855	3060
1/ No computer u	sage costs assumed	· 2/ MRPM ap	pplication not recom	mended.

ERIC

57 · A-37

TABLE 3 (CONT)

State	Design and	Implementation	System Mair (Annual C	ntenance Cost)
bidie	Min Estimate,	Max Estimate, \$	Min Estimate, \$	Max Estimate \$
Montana 2/	3535	3535	1520	1520
Nebraska	4835	6495	2080	2195
Nevada	9005	9005	1530	1530
New Hampshire 1/	2440	5065	1125	1380
New Jersey 1/	12,280	12280	4225	4225
New Mexico	4990	4990	1350	1350
New York 1/	5710	5710	1630	1630
North Carolina $\frac{1}{}$	5275	5275	1725	1725
North Dakota	4735	6185	565	1165
Ohio ¹ /	10,880	10,880	3110	3110
Oklahoma 1/	4870	8705	1440	1515
Oregon	9640	9640	1865	1865
Pennsylvania 1/	6840	6840	1510	1510
Rhode Island	5440	5440	1500	1500
South Carolina $\frac{1}{2}$	6420	6420	1155	1155
South Dakota $\frac{1}{2}$	6165	6165	950	950
Tennessee 1/	6670	8970	1405	1405
Texas	9105	16235	3040	4455
Utah	5960	5960	1730	1730
Vermont	3595	7080	1230	1370
Virginia	4035	5050	1460	1480
Washington	2900	2900	250	250
West Virginia 1/	7325	7325	1060	1060
Wisconsin $\frac{1}{}$	6150	3150	1600	1600
Wyoming 1/	5475	5475	1550	1550
Total	310,273	350,953	91,534	96,463

1/ No computer usage costs assumed.



MRPM application not recommended.

V. DESCRIPTION OF STUDY ACTIVITIES

INTRODUCTION

- 5.1 This section details the activities which took place from the inception through the completion of this study, including the study objective, the procedure for its accomplishment, and the results of each of the contractual tasks.
- This description is presented so that the actions necessary to accomplish the study objectives may be fully understood and so that the results may be evaluated in the light of the procedures necessary to accomplish them. It may provide some guidance for future studies involving broad survey and data collection scopes.

TASK 1—REVIEW OF INFORMATION REQUIREMENTS

Objective

The purpose of the review of the MRPM information requirements was to modify the definition of certain of the model's data elements, where such modification was necessitated by the total unavailability of the data or the possible misunderstanding of their description.

Procedure

Representatives of the contractor and BEH met to discuss the results of the Phase II Pilot Survey and their implications on the original set of information requirements. The data elements to be requested of each state were reviewed, to enable the design of an effective data collection instrument to be used during the 50-state survey. Additionally, they discussed those data elements whose development required individual discussion with each state.

Results

On the basis of the availability and reliability of the data requested during the Phase II Pilot Survey, it was decided to change the recommended



definition of the set of target groups from the total handicapped child population (those identified plus those believed to exist) to the total <u>identified</u> handicapped child population. The main reason for this decision was the realization that manpower estimates based on a subjectively determined number of children would have little meaning. Since none of the five pilot survey states had any empirical data to support their estimates of their unidentified handicapped child population (usually calculated by applying the set of national prevalence rates, or minor modifications of them, to their school age population), it was reasonable to assume that this was the case nationwide.

5.6 Because the data collected during each state visit was to be used to make current, rather than projected, estimates of special education manpower requirements, data elements used by the MRPM to describe the movement of children into and out of each target group were dropped from the list of those to be collected. It was also decided to eliminate any further requests about the movement of personnel into and out of the field of special education, since a mathematical model to project manpower supply cannot be developed until after the completion of motivation studies.

TASK 2—QUESTIONNAIRE MODIFICATION

Objective

5.7 The purpose of the questionnaire modification was to produce a questionnaire that would contain a request for the data elements needed to calculate current manpower requirements, would be easily understood both by the interviewer and the interviewee, and would facilitate the analyst's compilation of the required information.

Procedure

Representatives of the contractor and BEH met to discuss the wording and format of the questionnaire. The contractor then prepared the questionnaire for presentation to the National Center for Educational Statistics (NCES) and to the Bureau of the Budget (BOB) for their review and approval.

Results

- Slight modifications were made to the suggested definitions of the target groups and the educational programs, to increase their clarity. Requests for data about the number or rate of new entrants to and attritions from each target group were deleted from the questionnaire, as was the request for supply mobility information. The request for personnel employment data and estimates of unfilled positions was divided into two forms, and two additional education categories, doctorate and unknown, were added to the request for employment data. Although the breakdown of personnel employment data by education level is not needed to calculate manpower supply, these breakdowns were retained in the questionnaire at BEH's request.
- 5.10 The format of each matrix used to record the data was redesigned to make it easier for the analyst to use. The previous format had been oriented



toward the state level special education administrators who were not thoroughly familiar with the MRPM and its information requirements.

- 5.11 Finally, the instructions were reworded to assist the analyst in the collection as well as the recording of the data.
- 5.12 Before the 50-state survey could commence, the questionnaire required the approval of NCES. The questionnaire was submitted to and approved by NCES before it was submitted to and subsequently approved by BOB.

TASK 3—MODEL DEMONSTRATION

Objectives

5.13 The objectives of the model demonstration (the actual application of the model in a real-world situation) were to demonstrate and document the validity and usefulness of the mathematical model, to correct any errors in the computer program of the model (REQMODEL), and to produce examples of the resulting computer output.

Procedure

- 5.14 Because of the unavailability at the state level of the detailed data needed, it was decided to demonstrate the model in a large city or school district having a large handicapped child population, a variety of educational programs for serving each category of handicapped children, and at least 4 years of historical data. A midwestern special school district satisfying all the criteria was chosen.
- 5.15 During the visit to that school district, detailed input data was collected for each academic year from 1964-65 through 1968-69. Data concerning the handicapped population (e.g., enrollments, attrition rates, and new entrance rates) was collected by age for six handicapping conditions— and their associated education levels:
 - a. Trainable Mentally Retarded (TMR)
 - Elementary—ages 6-12
 - 2. Secondary—ages 13-20
 - b. Educable Mentally Retarded (EMR)
 - 1. Elementary—ages 6-12
 - (a) Regular
 - (b) Special instruction (SI)

Data for the Speech Impaired group was not sought because of the large size of the population and the limited amount of time allotted for the data collection.

- 2. Secondary-ages 13-20
- c. Orthopedically Handicapped (OH)
 - 1. Elementary—ages 6-13
 - 2. Secondary—ages 14-20
- d. Visually Handicapped (VH)
 - 1. Elementary—ages 6-12
 - 2. Secondary—ages 13-20
- e. Special Learning Disabilities (SLD): Ungraded—ages 6-14
- f. Auditorially Impaired (AI)
 - 1. Preschool—ages 5-6
 - 2. Elementary—ages 7-13
 - 3. Secondary—ages 14-20.
- 5.16 From each year's enrollment data, program weights were computed and inputted into the model. Since average attrition rates were calculated and held constant for the time period of the projection, the parameter values, representing the factors that would normally influence the changes in these rates over time, were assumed to be equal to 1.0, a value indicating "no influence." The average new entrance rates were similarly treated.
- 5.17 Since this special school district serves the total diagnosed population, and because there is neither a diagnostic waiting list nor an indication that there should be one, the participation rate of the handicapped child population in special education was set at $1.0 \ (= 100\%)$.
- Data related to personnel was also collected. The actual number of each type of personnel employed during each academic year was used to compute the existing personnel/pupil contact ratios (i.e., personnel input proportions). It was assumed, based upon discussions with the city's special education administrators, that the change in the ratios from the year 1964-65 to 1968-69 was due wholly to the influence of personnel input policy and/or practice. Thus, the parameter values representing this influence on each personnel/pupil contact ratio were computed as the average yearly change in each ratio. The parameters representing the influence of education technology on each ratio were set equal to 1.0, a value indicating "no influence." Additionally, desired personnel/pupil contact ratios were obtained to allow comparison of manpower requirements generated on the basis of desired conditions.



- 5.19 Using the 1964-65 data as a base, the target group populations, actual personnel input proportions, and resulting manpower requirements were projected for 4 years, to the 1968-69 academic year. Census data for the general child population was inputted into the model. Samples of each of the four sets of outputs from the model run are presented in Figures 1 through 4.
- The first set of output (Figure 1) contains the projected information for 5.20 the handicapped child population and its related parameters. Figures in the columns labeled "Number," "Attritions," and "Entrants" are actual numbers of children. Thus, referring to Figure 1, there were 5.10 children of age 10 projected as new entrants to the TMR Elementary target group, TG (1), during 1967-68 (entering officially at the beginning of the 1968-69 academic year). Of the 29.78 children of age 10 in TG (1) at the beginning of the 1968-69 year, 3.64 are expected to attrite during the year. These figures are calculated, using the attrition rates [P (1) represents the rate of return to normal school, P (2) represents the rate of dropping out due to other nonmortality reasons, and P (3) represents the rate of mortality] and the actual incidence rates (rate of actual diagnosis) for the handicapping condition (represented as "Large E"). For each target group, the parameter "Small E" is used to indicate whether the previous target group represents the same handicapping condition and a lower education level. As an indicator, it has only two possible values: (a) Small E = 1 if any new entrants to the lowest age level in the target group are from the previous year's graduates of another target group representing the same handicapping condition, e.g., entrants to age 13 in the TMR Secondary are graduates of TMR Elementary, age 12 the previous year, and (b) Small E = 0, otherwise.
- 5.21 The second set of output data (Figure 2) contains the general child population information. These figures were calculated for input to the model by using the school district yearly census information and interpolating by single year of age, based upon Federally developed proportions of children in each chronological age.
- The proportion of children enrolled in each program and the projected personnel/pupil contacts (contained in the third set of output) are shown in Figure 3. The personnel figures in the first five columns represent the number of students that each personnel type can serve during the course of one academic year (i.e., the personnel/pupil contacts); the personnel figures in the sixth column represent the weighted average of these personnel/pupil contacts across all educational programs. Referring to the sample page (Figure 3), although a teacher of EMR Elementary group serves 10.798 children, only .9457 of the children served in the target group are enrolled in the program requiring that teacher (Program 1). Thus, in effect, for every 11.418 children enrolled from that total target group, one teacher of EMR Elementary is required. The 11.418 is the weighted average for the teacher. Similarly, although an assistant for EMR-SI serves 16.286 children, only .0543 of the children being served in the



FOR TG (11) = AUDITORIALLY IMPAIRED - ELEMENTARY

AT TIME T = 4, THE VALUES OF THE INDEPENDENT VARIABLES ARE

COMPLETED PREV. TG LAST YR.	20.917								
LARGEE	.0006895	.0003883	.0005366	.0002484	.0001918	.0003442	.0003660		
ENTRANTS	12.60	7.26	9.76	4,53	3.48	6,23	6,45	1 1 1	71.22
P (3)	0	0	0	0	0	0	0		
P (2)	.0200000	.0650000	.0770000	.1130000	0000090°	0000680*	.1520000		
=!		_		_	_		_		
5	.2040000	.1510009	.2310000	.1940000	.1600000	.400000	.3330000	,	
ATTRITIONS P (-	7,63 .1940000		10,04 ,4000000	•	1 1 1 1	58,49
	7,51	7,11	-		8.49		6.92		176.89 58.49

FIGURE 1. TARGET GROUP POPULATION

Education Policy/Practice = 1.000000

Medical Technology = 1.0000000

Small E = 1.000000

Diagnostic Technology = 1.0000000

Participation Factor = 1.0000000

ERIC Full Text Provided by ERIC

64

A-44

FIGURE 2. GENERAL CHILD POPULATION INFORMATION

FOR THE GENERAL POPULATION AT TIME T = 4, THE CENSUS FIGURES ARE

NUMBER	0	0	0	0	17383.00	18288.00	18510.00	18859.00	19287.00	18770.00	18807.00	18723.00	18663.00	18176.00	18066.00	17669.00	17335.00	16697.00	16317.00	15891.00	16070.00	o
AGE	0	-	2	ဗ	4	ß		1	œ	6	10	=	12	13	4	15	16	17	8	, 19	20	21

I

I

I

I

Ī

I

I

AT TIME T = 4, THE VALUES OF THE T/P RELATED INDEPENDENT VARIABLES
FOR TG (11) = AUDITORIALLY IMPAIRED - ELEMENTARY
ARE

2 = DAY SPECIAL SPEC, INSTRU.
3 = COOPERATIVE SPEC, CLASS

PROGRAM TYPE DEFINITIONS. 1 = DAY SPECIAL CLASS

		WEIGHTED AVERAGE				13,258	39,773	29.661
			ĸ	72000C		0	٥	14,000
			4	0		0	0	0,
		PROGRAM TYPE	ဗ	0		0	0	0
	N.C.		8	0		٥	0	0
4 = RESOURCE ROOM	5 = ITINERANT INSTRUCTION		-	.5280000		7,000	21,000	0
				WEIGHTS (PROPORTION OF CHILDREN IN EACH PROGRAM)	PERSONNEL INPUT PROPORTION FOR-	TEACHER OF DEAF - ELEMENTARY	ASSISTANT FOR DEAF - ELEMENTARY	HEARING CLINICIAN - ELEMENTARY

FIGURE 3. PROJECTED PERSONNEL INPUT PROPORTIONS

EMR Elementary target group are enrolled in Program 2; thus, for every 299.921 children enrolled from that total target group, one assistant of this type is required.

- The final set of output presents the calculated manpower requirements, 5.23 by personnel type. As shown in Figure 4, there were 75.19 teachers of the EMR, elementary level, projected as required during the 1968-69 academic year. These projected figures for the target group populations and resulting manpower requirements for the 1968-69 data year were compared with actual figures for that year. (See Tables 4 and 1, respectively.) In Table 4, differences between the projected and actual number of children of a particular age within a target group are due to the fact that actual attrition and entrance rates for any given year can vary greatly from average rates for the 4-year time span. In cases where individual rates vary so much, an average rate should be calculated from a minimum of a 5year accumulation of data. However, it should be noted that the longer the special education program has been operating, the more stable its associated yearly attrition and entrance rates will be. Despite these differences between individual ages, the projected total number of children in each target group (the number used to determine requirements) is reasonably close to the actual total. The only exception to this is for the AI Preschool target group; the discrepancy here resulted from the very rapid rate of growth of the group during the last year of operation. In Table 1 (on page A-13 of this part), the comparison of the projected manpower requirements with the actual number of personnel employed is favorable.
- 5.24 Again, using the 1964-65 data as a base, a 4-year projection was done using desired personnel/pupil contacts. Comparison of the manpower requirements resulting from these two projections is shown in Table 5.

Results

- 5.25 Two computer runs of the REQMODEL program were made, using the data collected in the modwestern special school district; on the basis of these runs, the validity of the model formulation was demonstrated. The feature of the model which allows a special education administrator to test the effect of differing assumptions, e.g., different personnel/pupil contacts, on the resultant manpower requirements was also demonstrated. Thus, the usefulness of the model was shown.
- 5.26 Projecting the target group population toward a known population enabled the programmer to catch and correct a few minor errors in the computer program, REQMODEL.



												FIGURE 4. PROJECTED MANPOWER	REQUIREMENTS													
NUMBER REQUIRED	18.22	8.04	18.13	62.46	2.44	7.31	16,24	2,59	1.29	65.20	6,14	2,12	2.83	2,12	10,34	2.68	7.91	1.64	2,44	E.	2.74	.29	3.77	2.28	11.90	13,34
PERSONNEL TYPE	TEACHER OF TMR - ELEMENTARY	TEACHER OF TMR - SECONDARY	AIDE FOR TMR	TEACHER OF EMR - ELEMENTARY	PHYSICAL ED. TEACHER OF ELEM. EMR	LANG, DEVEL, TEACHER OF ELEM, EMR	SPEECH THERAPIST	TEACHER OF EMR - SI - ELEMENTARY	ASSISTANT FOR EMR - SI	TEACHER OF EMR - SECONDARY	DRIVER ED, TEACHER OF SECON, EMR	VGC, HOME EC, TFACHER OF SECON, EMR	PHYSICAL ED. TEACHER OF SECON. EMR	INDUSTRIAL ED. TEACHER OF SECON. EMR	TEACHER OF O.H ELEMENTARY	TEACHER OF O.H SECONDARY	AIDE FOR O.H ELEMENTARY	AIOE FOR O.H SECONDARY	PHYS, THERAPIST FOR O.H	PHYS, THERAPIST FOR O.H SECON,	OCCUP, THERAPIST FOR O.H ELEM.	OCCUP, THERAPIST FOR O.H SECON.	TEACHER OF V.H ELEMENTARY	TEACHER OF V.H SECONDARY	TEACHER OF SPECIAL LEARNING DISABIL.	TEACHER OF AUD, IMP ELEM



TABLE 4
COMPARISON OF 1968-69 TARGET GROUP POPULATIONS-POPUCTED VS ACTUAL

Twan--

Land American

Parameter 5

Transfer of

Establish of the State of the S

.

8			٠	H.O	H.	ν.н.		Q.I.S	D.	A.I	
Projected Actual Projected Actual		Actual	_	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
0 0 0		0		0	G	0	0	0	O	5.92	8
28.16 33 50.22 58		28		12.32	10	3.62	8	4.66	2	24.65	36
35.44 36 83.84 82	.84	82		17.54	17	4.80	7	16.29	21	33.52	23
39.44 33 110.95 101	-95	10		20.17	20	5.67	4	25.33	31	32.93	31
36.70 36 131.83 127	.83	12		19.48	22	7.40	က	30.00	29	34.56	32
29.78 32 144.37 154	.37	15	4	22.27	25	4.80	8	27.25	14	24.85	24
35.03 39 160.21 174	.21	17,	٠	18.26	15	5.96	9	15.60	61	15.84	14
32.30 31 177.15 170	.15	17		14.63	13	3.99	က	10.92	6	20.53	20.
.83 18 186.51 173	.51	17		9.71	10	3.42	2	1.68	ဗ	14.26	19
36.03 32 181.41 169	.41	16	6	8.97	8	61.9	S	0	н	11.58	15
20.90 21 156.46 152	.46	153	~1	5.55	က	3.33	က	0	0	13.87	80
24.15 30 121.25 127	.25	127		3.72	н	2.66	S	0	0	98.6	11
18.09 19 102.78 127	.78	12	7	3.87	4	2.32	2	0	0	8.20	10
11.19 8 69.66 75	99.	7	2	4.65	S	1.81	ю	0	0	2.60	11
10.91 10 26.45 20	.45)X		2.28	1	.26	0	0	0	2.88	8
.62 0 3.06	90.		0	.43	0	0	0	0	0	0	0
0 0		0		0	0	0	0	0	0	30.58	44
236.86 240 858.55 866	.55	998		134.39	132	36.23	34	0	0	176.90	163
144.72 138 847.58 843	.58	843		29.48	22	19.98	20	0	0	52.00	57
0 0		0		0	0	0	0	131.73	132	0	0

TABLE 5
COMPARISON OF 1968-69 MANPOWER REQUIREMENTS BASED ON PROJECTED
ACTUAL VS PROJECTED DESIRED PERSONNEL/PUPIL CONTACTS

Personnel Type	Manpower Requirements	wer	Personnel Type	Manpower Requirements	ower ments
	Projected Actual	Projected Desired		Projected Actual	Projected Desired
Teacher of TMR - Elementary	14.52	18.22	Aide for OH - Secondary	1.46	1.64
Teacher of TMR - Secondary	10.42	8.04	Physical Therapist for OH -		,
Aid for TMR	13.05	13, 13	Elementary	2,73	2.44
Teacher of EMR - Elementary	75.19	62,40	Physical Therapist for OH -	.50	. 33
PE teacher of EMR - Elementary	1.23	2.44	Occupational Therapist for OH-		
Language Development teacher			Elementary	3,25	2.74
of EMR - Elementary	8.58	7.31	Occupational Therapist for OH -	_	
Sp			Secondary	.27	• 29
Elementary	2.39	16.24	Teacher of VH - Elementary	3,01	3.77
Teacher of EMR-SI - Elementary	2.96	2,59	Teacher of VH - Secondary	2.32	2.29
Assistant for EMR-SI - Elementary	2.86	1.29	Teacher of Special Learning		
Teacher of EMR - Secondary	50.15	65,20	Disabilities	9,16	11,90
Driver Education teacher of EMR - Secondary	1,00	6.14	Assistant for Special Learning Disabilities	2.58	2.92
Vocational Home Economics teacher			Social Worker - SLD	66.	.91
of EMR - Secondary	1.74	2.12	Teacher of the Deaf - Pre-School	3.59	4.63
PE teacher of EMR - Secondary	1.22	2.83	Teacher of the Deaf - Elementary	11.70	13,34
Industrial Education teacher of EMR -			Assistant for Deaf - Pre-School	1.78	2.32
Secondary	1.76	2.12	Assistant for Deaf - Elementary	4.34	4.45
Teacher of OH - Elementary	11.99	10.34	Teacher of Deaf - Secondary	1.68	1.37
Teacher of OH _ Secondary	3.29	2.68	Hearing Clinician - Elementary	7.29	6.16
Aide for OH - Elementary	9.02	7.91	Hearing Clinician - Secondary	1.82	2.93



TASK 4—DEVELOP FORMAT FOR ANALYSIS OF STATE DATA DEVELOPMENT POTENTIAL

Objectives

5.27 The primary purpose of developing the state analysis format was to ensure the completeness and compatibility of the analysis of the information flow in each state, during the visit and in the resulting written report. The format was also developed to assist the analyst in the organization and order of his activities while visiting each state. Another objective was to increase the analyst's awareness of possible limitations in each state to the development of particular data elements.

Procedure

- 5.28 An outline was prepared for the analysts, indicating the definitions and suggested sequence of activities and alternatives within those activities. Briefly, the outline directed the analyst to
 - a. Review materials received from the state so as to become as familiar as possible with their definitions, programs, organization, etc.
 - b. Explain the purpose of his visit to the administrator of the state special education agency; discuss with the administrator the advantages of improved information flow, including the ability to use more sophisticated management tools for planning purposes; and discuss with and motivate the administrator to use the MRPM as a tool.
 - c. Discuss the organization of responsibility for special education and the current information flow, including interagency flow, with the staff of the state special education agency and of any other agency having the responsibility for educating a portion of the handicapped child population.
 - d. Analyze the current status of the special education information system.
 - Analyze current reports received from the LEA or other state agencies in terms of their frequency, content (data elements), format, and data source
 - Evaluate current methods of processing information and preparing output reports



- Analyze current output reports in terms of function, content, format, and frequency.
- e. Analyze the development potential of needed data elements.
 - Determine the existence and availability of detailed data elements to be included in the special education information system
 - 2. Determine the potential data sources.
- f. Determine the kind and amount of data processing (manual and automatic) support activities available for the development of a more detailed special education information system.
- g. Develop at least one written description of an information system needed to support the MRPM and other state planning and evaluating functions.
 - Analyze new information flow requirements in terms of frequency, methods of transmitting data, new or modified report contents and formats, and data sources
 - Analyze data processing requirements of the recommended special education information system
 - Summarize the design of the recommended information flow and the associated special education information system
 - 4. Discuss potential non-model uses for the data elements contained in the recommended system
 - Evaluate, in terms of manpower and equipment, the additional resources required by the state to implement the recommended information system.
- h. Collect and record in the questionnaire special education data that is currently available.
- i. Discuss findings and initial system development description with the administrator of the state special education agency.



Figure 5, which displays the alternatives within the primary data development activities as they are related to possible limitations to the data development, was also prepared for the analyst to assist him in performing activities 5-7 listed above.

5.29 Additionally, several staff meetings of the analysts were held to discuss the activity outline and the possible situations that the analyst could encounter during the course of his state visits, and to develop relatively standard answers to questions that would probably be asked of him. In order to test the state analysis format, the initial two state visits were made by four analysts working as a team; this allowed each analyst to gain confidence in the validity and applicability of the developed format.

Results

5.30 Assisted by the state analysis format, each analyst was able to conduct a set of complete, efficient state visits, knowing that his analyses were compatible not only within the states that he visited but also with the analyses performed by other analysts.

TASK 5—SCHEDULE AND ARRANGE ON-SITE VISITS

Objective

5.3! The objective of this task was to plan carefully the on-site visits to the states so that excessive costs could be avoided and effective performance could be maintained by the survey team.

Procedure

- 5.32 The chain of events followed in accomplishing this task was as follows:
 - a. A letter was mailed from the Associate
 Commissioner, Bureau of Education for the Handicapped, to the principal education officer in each
 state, with a copy to the special education director.
 This letter briefly explained the objectives of the
 survey, introduced the contractor, and solicited the
 state's cooperation in the study effort. These letters
 were mailed in late July and August 1969.
 - b. At the same time, preliminary schedules for visiting the states were prepared. These preliminary schedules were developed to ensure project efficiency and to minimize the time staff members would spend "on the road." The basic arrangement, with the exception of states near the contractor headquarters, was to schedule one staff analyst to visit each state for a



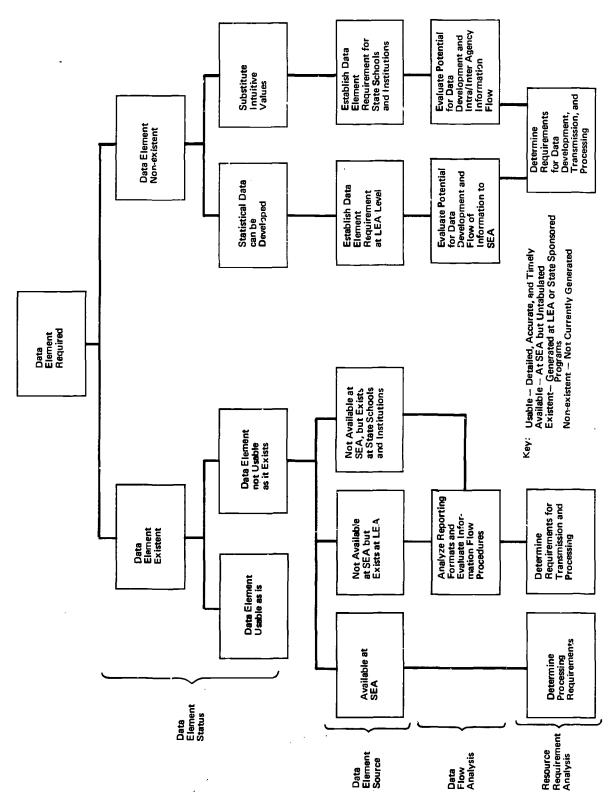


FIGURE 5. PROCEDURE FOR ANALYSIS OF STATUS AND DEVELOPMENT OF A DATA ELEMENT



maximum of 5 days. To reduce travel expenses, states were paired permitting the staff analyst to visit two states in a single trip. A one week pause was scheduled between each two weeks of travel to permit the staff member to consolidate his notes and outline his final report while the results of the visit were still fresh in his mind.

- c. Within a reasonable period after the mailing of Associate Commissioner's letter (usually 2 to 5 weeks), the staff member contacted the principal education officer by telephone and/or the special education officer in the states he was scheduled to visit. He again reviewed the survey objectives and answered any questions that may have been asked. A tentative survey schedule date was suggested by the staff member, and a mutually agreeable schedule date was established.
- d. A letter of confirmation of the scheduled survey date and a more detailed written explanation of the model and its objectives were then mailed out.

 (Initially the questionnaire that was used to collect current enrollment data was also forwarded; however, after a few visits it was determined that the advance questionnaire caused some misunderstandings or became misplaced, and this procedure was discontinued.)

Results

- 5.33 These measures produced several benefits. Rapport was established between the state director and the contractor even before the actual visit. In addition, very few scheduling difficulties were encountered. Some reshuffling was necessary, at the states' request, but conflicts were avoided with only a minor effect on the schedule for completion of the survey task. Travel was less expensive as a result of the state-pairing method.
- 5.34 A problem did arise, however, which contributed to scheduling difficulties and caused an extension of the survey time frame. The delay in the Bureau of Budget approval of the questionnaire delayed the starting time for portions of the survey by 4 or 5 weeks.

TASK 6-CONDUCT ON-SITE VISITS TO STATE SPECIAL EDUCATION AGENCIES

Objective

5.35 The purpose of the survey was to review and analyze the capability and potential for utilization of the MRPM by the state agencies responsible for the

education of handicapped children. The survey included an analysis of:

- a. The capability of existing information flow processes to provide the necessary model input data
- b. The existing automatic data processing capability to process the model program
- c. The special education staff capability and desire to utilize the model.

Procedure_

- The state visits usually proceeded through four phases: (1) the explanation of the model application, (2) the collection of currently available data, (3) the analysis of the existing special education information flow, and (4) assessment of the state capability to utilize the model.
- 5.37 The explanation of the model application was usually made to the special education director and, when possible, his staff and other agency heads who participate in the education of handicapped children. This discussion was directed at presenting the concepts of the model and the advantages of its utilization and evaluating the degree of understanding and acceptance of the model concept. It was not unusual for the survey staff member to give this explanation several times because of the difficulty of assembling all the appropriate personnel at one appointed time.
- 5.38 The data collection phase was not always distinguishable from the analysis of information flow activity. Frequently, while endeavoring to collect data through interviews with knowledgeable personnel, through the examination of reports, and through the extraction of data from records, some valuable knowledge was obtained about data sources, levels of information, and information flow.
- 5.39 However, the prime consideration of the data collection effort was to obtain data which could be used to calculate present manpower requirements. A questionnaire was developed for recording the following data:
 - a. Age ranges by handicap group and education level
 - b. Identification of the special education programs
 - c. Enrollment by handicap group, education level, and education program
 - d. Number of children diagnosed as needing but not receiving services
 - e. Number of children referred and waiting for diagnosis
 - f. Number of children from e. above expected to need special education



A-56

- g. Number of handicapped children not referred for diagnosis but believed to exist
- h. Personnel/pupil contact ratios by handicap group, education level, and education program
- i. Personnel employed by handicap group, education level, occupation, and employee education
- j. Personnel not in direct contact with handicapped children
- k. Unfilled direct contact positions for special education.
- 5.40 This information was sought from the special education agency and any other agencies that had a responsibility for the education of the handicapped. As described in Section III, certain limitations occurred which affected the extent to which some of the survey objectives could be accomplished.
- 5.41 Aside from the information developed while collecting data, the analysis of the existing data flow included:
 - a. Review of the content, originating source, and utilization of existing forms
 - Review of the present use of automated data processing, its availability for application to special education information systems, and its capability to process MRPM programs
 - c. Interviews with cognizant special education personnel regarding factors which could affect the development of the model data elements
 - d. Interviews with other agencies to determine their handicapped child educational responsibilities, their flow of information, and their willingness to cooperate with the state special education agency in the development of an overall handicapped child data base.
- 5.42 The assessment of the states' capability to utilize the model was an on-going process throughout the visit. Attitudes, manpower skills and availability, the status of the existing information flow, and organizational and legislative influences are all factors which were considered in this assessment.

Results

As a result of the visits to the states by members of the survey team, and because of the excellent cooperation received from the state staffs, it was possible to realize several benefits from the visits. Many states became aware



of the need for additional data and have initiated studies to improve the information flow. The visits provided motivation for upgrading information requirements by identifying the uses and applications of the MRPM. As a direct result of conversations during the survey visits, 12 states have begun the collection of model data elements. Other states, before beginning detailed consideration of implementation steps, are awaiting state analysis recommendations, the model use instruction guide, and the model computer program.

- 5.44 The major tangible result of the state survey visits was the derivation of recommendations to implement an improved information flow that would provide the states with additional management information and also supply the data elements necessary to the implementation of the model for manpower projection. An estimate of the extent of assistance required to implement and maintain the information flow has also been prepared. These recommendations are presented in individual state analysis reports contained in Part D of this report.
- 5.45 The data collection effort did not produce data of the quality desired, because data was frequently not available, or if available, was not easily accessible at state levels. Age ranges by handicap group and education level were usually available, although in the case of some handicap conditions (TMR, and emotionally disturbed, for example), the age/level structure was artificial. Forty states were able to define the age ranges of their handicapped groups by education level.
- 5.46 Special education programs as such were not always definable in the state's educational structure. Residential and itinerant (including homebound instruction) programs were easily identifiable, but more subtle graduations were more difficult to distinguish. Twenty-eight states were able to identify their special education efforts by education program.
- 5.47 Aggregate enrollment data by handicap group was usually available for the public school system. For other state agencies, it was more difficult to obtain, unless each agency or institution was individually contacted. Private school data was rarely available, except where program approval was required or tuition publically funded. Breakdowns of enrollment data by education level and education program were occasionally available. Within these limitations, data representing enrollment by handicap group was almost completely available in 25 states and partially available in 18 more.
- 5.48 Data on the number of children on special education waiting lists was not usually available, and when available, the degree of confidence in its completeness was low. Usually, if waiting lists were maintained at the local level, this data was not transmitted to the state level.



- 5.49 Data on the number of children referred and waiting for diagnosis, the number of those children expected to need special education, and number of children not referred but believed to exist was practically non-existent, except as created by the application of prevalence rates to the general education enrollment. In most cases, the prevalence rates applied were the national rates or modifications thereof.
- 5.50 Personnel/pupil contact ratios were usually available. Some states have more refined ratios than others, but the general level of definition included ratios by handicap group. Thirty-six states had personnel/pupil contact ratios for each of their handicap groups, and 12 more had ratios for just their major handicap groups.
- 5.51 Personnel employment data by handicap group/occupation was not too reliable. Seldom was this data available by reference to a statistical listing. It was usually obtained by a review of state special education directories, classroom reporting forms, or an interpretation of related statistical data. As in the case of enrollment data, employment numbers from other state agencies or private schools was most difficult to obtain within the survey time frame. Information on employee education level was most incomplete, and when available, it usually came from an automated personnel data file printout. Only 26 states had reasonably complete data on numbers of special education personnel employed, while 16 more states had partial employment data.
- 5.52 Counts of personnel not in direct contact with handicapped children and counts of unfilled direct contact positions were data elements to which the state special education agencies could seldom respond because of lack of data from the local level. The data that was collected was extremely sketchy.
- 5.53 The effort to collect the foregoing data, while not as successful as anticipated, did contribute significantly to the other survey objectives however. The search for data revealed many of the data gaps and shortcomings in the basic information flow.

TASK 7—PREPARE STATE ANALYSES

<u>Objective</u>

5.54 The purpose of the state analyses was to formulate statements of data development potential in each of the states. Each analysis essentially involved the examination of the nature of available data, identification of data gaps, and preparation of reports on probable means for data development.

Procedure

5.55 Each survey staff member prepared a state analysis report for each state he visited. The format for this report is briefly outlined below.



- I. Introduction A brief review of the purpose of the MRPM and the objectives of the state survey.
- II. Summary A short statement of the findings and recommendations contained in the report.
- III. Responsibilities for Special Education A review of the state level organizational structure as it pertains to those agencies that have responsibilities for the education of handicapped children. This section provides an overview of the interagency complexities which may affect a unified handicapped child information flow.
- IV. Data Element Evaluation An element by element evaluation of the current availability of those data elements necessary to the full application of the MRPM. The current data status, a determination of missing elements, an examination of reporting formats, and suggestions concerning missing data sources are discussed as they affect each data element.
- V. Processing Potential An analysis of the computer hardware capability to process the MRPM computer program and the potential availability of the computer for special education use. Personnel capability to prepare inputs and utilize model outputs is also evaluated.
- VI. Additional Factors This section contains a brief discussion of those factors, exclusive of data element availability, which can influence the implementation potential. This may include organizational, fiscal, legislative, or political considerations.
- WII. Recommendations The data availability having been evaluated, the data gaps identified, and the processing potential determined, recommendations are presented not only for the development of specific data element information but also for general improvement of the existing information flows.
- VIII. Resource Requirements —An estimate is made of the manpower resources required both to implement and maintain an information flow capable of supporting the model. The implementation time frame is also estimated.



- IX. Persons Interviewed A list of the people interviewed during the survey visit.
- 5.56 Upon completion of the report draft, a copy was sent to the state special education director by registered mail with a copy to the state's chief education officer. Review by state special education personnel was encouraged, and it was requested that inaccuracies or other comments be noted and returned to the contractor. If no corrections were necessary, or if the state desired to make no comment, it was requested that receipt and review be acknowledged. This procedure was followed in an effort to eliminate inaccuracies, errors, or misunderstandings prior to finalization and publication of the report.
- 5.57 Upon receipt of comment from the state, the author corrected errors and evaluated the comments. If they were pertinent to the content, the comments were incorporated in the report.

Results

5.58 The response to the drafts of the state analysis reports indicated that the intent and content of the reports were well received. Many positive comments were received on the utility of the report as a guide to improving state information systems. Some states welcomed the report from an independent source as a means of reinforcing their need for improved information. Some errors were discovered and corrected. Several report updates were required as a result of information flow actions taken by states and reported to the contractor subsequent to the state survey visit. The reports therefore reflect the status of each state's special education system at the time of this Phase III report preparation, insofar as the state has reported it to the contractor. It was obvious that some states were immediately responsive to the study by beginning to take, or continuing to take, positive action to improve their special education information flows. Thirty-six of the states responded to the report by mail or telephone, and only one state was negative in its comment.

TASK 8—ESTIMATE STATE REQUIREMENTS

Objective |

5.59 The objective of this task was to prepare estimates of current manpower requirements in accordance with available data. If the data available was adequate, an estimate of the nationwide special education manpower could be compiled.

Procedure

5.60 The data collected in Task 6 was used as a basis for the calculation of current manpower requirement estimates. Those specific data elements necessary to this calculation were:



- a. Enrollments, plus waiting lists when data were available, by handicap group, education level, and education program
- b. Personnel/pupil contact ratios, by handicap group, education level, and education program.
- 5.61 The personnel/pupil ratios were applied to the appropriate handicar group population enrollment data and the estimated personnel requirements were calculated. For example, a population of 3,268 EMR with a personnel/pupil ration of one teacher to 12 children yields an estimated requirement for 272 teachers of the educable mentally retarded. However, because of the lack of waiting list data, most of the calculations were based on the enrolled population and are, as a consequence, underestimations of the personnel requirements.

Results

5.62 As indicated in the discussion of the results of the data collection effort, the basis for the calculation of the estimated manpower requirements is not as satisfactory as was desired. The estimations are tabulated and compared with actual employment data in the tables contained in Part A, Appendix 1, of this report.

TASK 9—ESTIMATE MANPOWER SUPPLIES

Objective

5.63 The purpose of this task was to record the current supply of special education manpower on a state-by-state basis to the extent permitted by available data.

Procedure

5.64 This task was performed in conjunction with the data collection procedure described in Task 6.

Results

5.65 The results of this task are also discussed in Task 6, and the tabulated results are contained in Part A, Appendix 1, of this report.

TASK 10—DEVELOP REQUIREMENTS AND METHODS FOR STATE REPORTING OF MODEL RESULTS

Objective

5.66 Since the primary purpose for the development of the Manpower Requirements Projection Model was to enable BEH to obtain estimates of special education manpower requirements, the objective of this task was to outline the procedures whereby BEH would receive the estimates produced by the MRPM.



Procedure

- 5.67 Ideally, BEH should receive a yearly estimate of manpower requirements from each state. Practically, however, some states may not apply the model at all and some may choose to apply it infrequently; thus, the only procedure outlined was for the transmission of a copy of the REQMODEL program output from a state to BEH.
- 5.68 A statement, suggesting to each state that a copy of the REQMODEL program output be sent (on a voluntary basis until it is made mandatory) to the Division of Training Programs, BEH-OE, HEW, is included in Section VII, page B44, of the Special Education Staff Users Guide (Part B of this report) and in Section II, page C-2, of the MRPM-Technical Documentation of the Computer Program (Part C of this report).

Results

5.69 Although the methods for the state reporting of MRPM results have been outlined, any description of the results must await the initial transmissions.

TASK 11—ESTIMATE TEACHER TRAINER REQUIREMENTS

Objective

5.70 The purpose of this task was to demonstrate the capability and validity of the Teacher Trainer Model presented in Section IV of the Phase I Report using actual data or data determined by one or more experts in the field of special education manpower training.

Procedure

- 5.71 The theory of the Teacher Trainer Model was demonstrated in Phase I by using simulated data to demonstrate the following options:
 - Option 1. Calculation of the teacher trainer requirements on the basis of a specified number of required enrollments.
 - Option 2. Calculation of teacher trainer requirements on the basis of a given number of students who require educational services and a conception of a model program area in terms of numbers of faculty.
 - Option 3. Calculation of the teacher trainer requirements on the basis of a program area defined in terms of a maximum number of enrollments.
- 5.72 The concept of the model as presented in the Phase I Report has been reviewed and the contractor has confirmed the theoretical validity of the model. Adequate data for actual testing was not available during the scheduled time frame and constraints of this phase of the contract.

ERIC
Full Text Provided by ERIC

B.G. Bruce, M.J. Allard, B.A. Johns, F.L. McCoy, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase I Report, 13 December 1968.

Re-ults

5.73 Although actual data has not been applied to this model, the logic has been demonstrated using the simulated data. It is suggested that BEH develop actual input data from ongoing programs as a further test of the model applicability.

TASK 12—ESTIMATE RESEARCH REQUIREMENTS

Objective

5.74 The purpose of this task was to develop and demonstrate a model to project special education research personnel requirements.

Procedure

5.75 Previous attempts (described in the Phase I Report 3/) to develop a model to project special education research personnel requirements were reviewed jointly by representatives of BEH and ORI. In addition, joint discussions about the problems involved were held and further attempts were made to formulate a straightforward relationship between research expenditure levels and research personnel requirements.

Results

The conclusion reached was that a model to project special education research personnel requirements would be very complicated and difficult to develop. In essence, it would have to be a large scale simulation model that could acount for (a) the categorization of different types of research, (b) the different types of research personnel (including their degree level) required for various types of research, and (c) the relationship of numbers of researchers required for various levels of funding. Thus this task is recommended for further action by BEH.

VOLUNTARY TASKS

Objectives

- 5.77 The purpose of the first voluntary task was to determine the attitude of each state special education agency toward collecting employee motivation information from local education agencies and other state education agencies employing special education personnel.
- 5.78 The purpose of the second voluntary task was to determine what type of financial assistance (similar to PL 85-926) each state offers to train special educators.

Procedure

5.79 During the course of each state visit, the analyst discussed the voluntary tasks with the administrator of the state special education agency and with some local agency personnel. When discussing the first task, the analyst





suggested the use of standardized entrance and exit interview formats, a copy of which could be sent to the state agency for compilation if the local or other state agency did not want to tabulate such data for their own use. For the second task, state assistance was defined as funds contained in the state education agency's budget that are to be used specifically to train special educators, rather than funds available to train all educators.

Results

- 5.80 Almost all the state level administrators of special education were in favor of collecting employee motivation information such as (a) reason for entering or leaving the field of special education, (b) previous or subsequent employment occupation, (c) source of new entrance or destination if leaving, and (d) employee availability for full or part-time work in the future. Since many of the local education agencies and other state agencies already conduct entrance and exit interviews in which they collect similar types of information, it should not be difficult for BEH to suggest a standard format or the basic framework of one.
- 5.81 Few states offered their own financial assistance to train special educators. The following is a list of the states that do offer assistance and the description of their programs, as discussed with each analyst during his visit to the state.
 - Alabama. One of the functions of the Program for Exceptional Children and Youth is to administer the state's in-service special education training program and PL 85-926 for special education trainees. No other information was given to the analyst.
 - California. At present, the state provides grants for summer scholarships to special education teachers working toward clearing their credential. The limitations are that the maximum reimbursement rate is \$50/unit, that the recipient must have been employed as a teacher in the state the previous year and must contract to teach special education in the fall, and that teachers of the Emotionally Handicapped are not eligible. During 1969, 6,875 grants were awarded.

For 1971, the state hopes to upgrade the program to include teachers of the Emotionally Handicapped, to include special education teachers who wish to upgrade their skills, to allow grants of up to \$50/unit for a maximum of 5 years, and to consider the grants as a loan, which the teacher may repay by working 1 year for each summer for which he received funds, beginning immediately after the summer (or the last summer if the



- teacher is also in full-time training during the academic year) for which funds were granted.
- Delaware. The state provides scholarships in the fields of medicine, law, and special education (at the undergraduate and graduate levels) for Delaware residents attending college outside the state (because of the limited capacity of the state university). In addition, the University of Delaware offers scholarships to teachers of the mentally retarded and other special education teachers for graduate level study, and offers a tuition-free (the only charge is \$10/person for room and board) summer course for special education teachers.
- Florida. Three scholarship programs are conducted, using state funds. The first, instituted in 1968-69, is for college juniors or seniors who are majoring in Special Education. The funds granted to these students, \$600/year, are considered as a loan which may be repaid in cash (through the standard loan procedure) or by working in the field of special education in the state for 1 year for each year of funds granted. During the first year of operation, this program funded 69 persons. For a teacher who is working in special education but is not yet certified, the second program provides reimbursement of the costs for courses required for certification. During the 1968-69 academic year, 553 of these scholarships were awarded. The third program grants up to \$60/quarter hour or \$80/ semester hour to certified special education teachers who attend summer sessions to obtain advanced training. During the summer of 1969, 65 teachers received funds.
- <u>Illinois</u>. When the mandate to place all diagnosed children in special education was introduced in 1965, a program was initiated to provide scholarships for the training of special education personnel.
- Ohio. Up to \$45,000 of state financial aid is available for special education teacher training.
- <u>Virginia</u>. State aid is provided to non-endorsed teachers (teachers who are certifed in regular education but not endorsed in a special education field) for tuition costs



- incurred while they are working toward special education endorsement. This aid is limited to \$20/semester hour.
- West Virginia. The state has proposed that \$116,000 be made available, beginning July 1970, for the retraining of regular teachers to become special education teachers. The funds in this proposed program would provide either for traineeships at a college or university or for extension service from a college or university.



VI. RECOMMENDED FURTHER ACTIONS

6.1 The submission of this Phase III report represents the completion of contractor efforts in the development of the Manpower Requirements Projection Model and the analysis of the status and potential of information availability in the states. The overall reaction of the states to utilization of the model and establishment of the necessary flow of information has been favorable, but considerable additional effort is necessary if the initial interest and motivation are to be utilized by BEH in implementing the use of the MRPM. This section presents recommendations for BEH actions considered appropriate to implementation of the current findings. It also presents recommendations for further related research intended to build upon the concepts developed in this study, as a means of further improving BEH capability to perform its overall responsibilities in education for the handicapped.

IMPLEMENTATION OF THE MANPOWER REQUIREMENTS PROJECTION MODEL

6.2 Part B of this report, the Special Education Staff Users' Guide, provides a description of the purpose and benefits of the MRPM, requisite data elements, general method of operation, and steps necessary for development and implementation. This material is presented in a non-technical context so that it can be most readily utilized by the special education administrator or staff personnel responsible for decisions regarding adoption and utilization of the MRPM within a state. Additional technical documentation regarding the computer program is presented in Part C for those individuals specifically responsible for this aspect of the model. Taken together, these two documents provide all of the written guidance and technical descriptions necessary for independent implementation of the model by each state.



However, given 50 disparate special education agencies, different in environment, experience, capability, and resources, it would be highly optimistic to expect implementation to occur readily and efficiently on the basis of written documentation only, no matter how complete and persuasive that documentation might be. For this reason, it is suggested that BEH consider the following actions as means of encouraging and ensuring the implementation of the model in the most appropriate and effective manner.

State implementation Demonstration

- As noted previously in this report, the validity of the model formulation and the feasibility of its use by state special education agencies were demonstrated during the earlier stages of Phase III. The results of this demonstration were discussed with the individual state personnel during the state visits and were generally accepted as an indication of the validity of the model. The applications and advantages of the model also were discussed with the state personnel; the discussions generally produced an appreciation of the benefits of model implementation.
- 6.5 It is important to note, however, that the scope of this study did not permit a test at the state level, i.e., using state data and under the observation of state personnel. As a result, state agencies do not have an example of model implementation that they can directly correlate with their own needs or environments. Furthermore, a one-time test of a system using historical data is not as informative or convincing as an actual extended application using current data. For these reasons, it is recommended that a state-level demonstration of the model be performed in order to present more convincingly the advantages of the MRPM to the individual states. At the same time, this demonstration will permit the identification and correction of minor problems that might arise in an actual implementation effort at the state level. In brief, such a demonstration would
 - a. Provide an example of model application as an increased incentive for application by other states.
 - b. Permit evaluation of the actual time frame and costs of implementation as compared to these estimated in this report.
 - c. Provide guidance to subsequent states regarding the approaches and possible pitfalls related to development of the information flow procedures necessary for support of the model.
 - A number of criteria may be considered by BEH in selecting or proposing the state (or states) for the demonstration. In general, since at least partial funding by BEH is anticipated, one of the criteria might be the overall cost of the demonstration effort. A second criterion would be the availability of data at the state level, in order to provide results within a reasonable period. That is, for demonstration purposes, it would be wise to choose a state in which results



can be shown in 1 year rather than 2 or 3 years, as might be the case in states requiring considerable improvement in the availability of data. Data availability is presumably the most stringent determinant of the time required to demonstrate the model, since other resources (e.g., personnel or ADP support) could be provided, for the period of the demonstration, by some special means.

- 6.7 Prerequisite to the selection of a demonstration state are the interest, concurrence, and cooperation of the state special education agency staff, as well as of those in other elements of the state education agency that might be involved. In addition, it would be preferable (a) that the state not have too large a population, since this adds excessive data volume not relevant to the demonstration; (b) that it have a well-established state educational organization so as to minimize the number of locals that must be involved in the demonstration; (c) that it have an active and comprehensive reporting system between local and state special education agencies; and (d) that it have no legislation that would constrain the identification of the handicapped child population beyond those numbers that the state has the capability to serve, as this constraint poses an arbitrary restriction hampering the application of the model findings.
- 6.8 Based on the state analyses performed in this study, it should be possible for BEH to identify states having these characteristics. Actual conduct of a state demonstration, therefore, is primarily dependent on the extent to which BEH wishes to motivate and support the demonstration, rather than on the availability of eligible states.

Regional Implementation Workshops

- 6.9 As noted previously, much was done during the state visits to develop an interest in each state in the improvement of its special education information system and in implementation of the model. The individual state analysis reports provided in Part D, and the users' guide and technical documentation provided in Parts B and C, are further extensions of this effort to encourage use of the model by the states. However, while these efforts set the stage for implementation by providing acceptance of the MRPM concepts and presenting the basic working tools, the actual initiation of the implementation effort in most states will require more direct contact with, and guidance to, those state personnel directly responsible for the implementation decision and the subsequent implementation effort. Included among these personnel are several levels within the special education staff (e.g., the director, the handicap specialist, and the staff analyst responsible for implementation), as well as representatives of other state agencies responsible for either education of the handicapped or support to the special education staff with regard to data processing or similar assistance.
- 6.10 To provide this direct contact with state personnel, it is recommended that BEH sponsor and present regional implementation workshops or seminars designed to further familiarize the state special education staff, and others concerned, with the benefits and requirements of improved information flow and MRPM application

These sessions should seek to involve the state personnel in the use of the system by encouraging discussion of the potential uses and possible problems specific to each state. BEH personnel can thus point out uses for MRPM and help to solve problems for each state, without the expense and time required for separate visits to each state.

6.11 BEH has utilized the regional workshop for other applications. The general approach for this application would be the same as that used previously. In this instance, the presentation could include the detailed explanation of the data requirements, the methodology for input to the model, the simulation potentials, and the interpretation of the output reports. Material provided in Parts B and C of this report can be used as the instructor's manual or textbook for the workshop. The workshops should also include a discussion of the sources of technical assistance available to the states, e.g., BEH, other states further advanced, or contractor support. The arrangements for obtaining this assistance can then be left to the individual states.

BEH Support of State Activities

- 6.12 The state survey visits, and the subsequent opportunities afforded the states to review the drafts of their respective state analysis reports, have created an interest in information improvement in many states that has been made evident not only to the ORI staff but also to members of BEH. It is essential that BEH take advantage of the impetus provided by this interest by seeking additional means by which it can encourage and support information activities within the state special education agencies. These activities should not be confined to the MRPM and its supporting information system; rather, they should pertain to the collection and application of data for improved management of all state special education functions.
- 6.13 In addition to providing technical guidance and assistance to the states, as exemplified by the documentation in Parts B, C, and D of this report, or by implementation of the preceding recommendations, BEH must also point out to the states the sources of funding available to support their information efforts. In this regard, BEH should at least ensure that the states are aware that the portion of Title VI funds allocable to administration can also be applied to the development or improvement of the information flow or utilization within the state. Further assistance could be extended by BEH either through the provision of supplemental grants specifically for information development or through Federal sponsorship of research contracts intended to develop findings of potential application for all states.

SUGGESTED FURTHER RESEARCH

6.14 One of the products of this study is the demonstration to the states of the benefits for special education management that may be obtained from an improved information flow and the use of planning tools such as the Manpower



Requirements Projection Model. This result illustrates the potential value to both Federal and state agencies of further research and development efforts related to the management of special education at the state level. There are, of course, several directions that such research might take; however, as a result of its direct contacts with the individual state special education agencies, ORI believes that Federally-sponsored research in the three areas discussed in the following paragraphs would be of significant value to the management and delivery of education for the handicapped.

Generalized Special Education Information Systems

- 6.15 The survey of state special education agencies demonstrated a strong need for improving the flow of information between local and state agencies and among various state agencies. Although such systems need not be complex or highly sophisticated, their design and implementation for each state may well require skills and resources beyond those readily available to the special education agency. Further, although each state agency is perhaps unique in its information requirements when considered in full detail, there are common characteristics among states that would permit the use by many states of one approach to satisfying an information requirement. In addition, only a slight modification of this basic approach might then permit it to be applied at several other states.
- The above situation, i.e., a recognized need for improved information systems, a shortage in available resources, and a generally common set of information requirements and approaches, suggests that consideration be given to developing one system of general use to all users—that is, the design of a generalized special education information system that would provide each state with the basic mechanism for the functions of data collection, data manipulation, and output report preparation, but would still be sufficiently flexible in its structure so that individual variations in state requirements could be readily accommodated. In this respect, the system would be similar in concept to the Manpower Requirements Projection Model, which provides each state with the same data collection, computational, and reporting procedures, but also permits each state to maintain its individuality regarding target group definitions, contact ratios, and other data elements or projection requirements. At the same time, this generalized concept would avoid the obstacles encountered by many short-lived system development efforts requiring standardization among all users to comply with system capabilities and specifications.
- 6.17 It is therefore recommended that, as a first step, BEH perform a study to evaluate fully the feasibility, potential benefits, and costs of such generalized special education information systems. Two basic generalized systems appear initially advisable: (a) a pupil accounting system for use by those states that maintain individual pupil records at the state level and (b) a data summary system for the use of those states in which local agencies are required to submit only

specified data summaries. The development of such generalized systems would have the advantages of

- Economy, because the development cost of the basic systems would not have to be repeated for each user.
- Encouraging states to upgrade their special education information systems, because of the availability of this additional assistance.
- Expediting MRPM implementation, because of the improved potential for the availability of the necessary supporting information flow.

Development of a Manpower Supply Model

- 6.18 The Manpower Requirements Projection Model developed in this study provides the state special education agency with the capability of projecting manpower needs by skill type and year of need. A companion manpower supply model would provide a similar capability for projection of available manpower to meet these needs. The utilization of both of these manpower planning tools would greatly assist the state special education director in the development of policies and practices necessary to match supply with demand. The information provided by the model for each state would also be useful at the national level in the evaluation of the needs and priorities of Federal programs designed to influence the supply of special education manpower. Effective use of the teacher trainer model developed in this study also would be enhanced by the availability of projections of manpower supply.
- 6.19 Preliminary work on this model was undertaken during this study, but the development of the model was hampered by the lack of sufficient information regarding motivational and mobility factors for special education students and practitioners. However, Phase IV of this current BEH study should provide additional information or these factors; this information may then be used as a basis for establishing supply parameters and determining their initial values. Completion of Phase IV may therefore make it feasible for BEH to conduct further research in the development of the manpower supply projection model.

<u>Development of Diagnostic Capabilities</u>

6.20 During the state visits it became obvious that very few states had diagnostic capabilities sufficient to identify most of the children in the state who should receive special education services. As a result, the true total special education service requirements in a state were seldom determinable except by estimation, and then generally by the use of national prevalence rates. Among the causes for this deficiency were the lack of funds for operating diagnostic facilities and paying qualified diagnostic personnel, and the lack of sufficient numbers of these trained personnel. BEH should consider the establishment of



a cooperative program with other Federal agencies (e.g., PHS) and the appropriate state agencies, to initiate and support diagnostic centers that would perform both medical and educational diagnosis and thus would identify those children requiring special education assistance. A corollary requirement would be the development of a diagnostic reporting system that would report identified handicapped persons to appropriate state and local agencies (i.e., special education, health, vocational rehabilitation), so that the total identified handicapped child population may be considered when making plans to serve that handicapped population.



APPENDIX 1 STATE DATA SUMMARIES

INTRODUCTION

1.1 One objective of the state survey was to collect data necessary for estimating current special education manpower requirements. A question-naire was developed to collect this as well as other data to provide the Bureau of Education for the Handicapped with information pertaining to the unidentified handicapped child population, the educational background of special education employees, indirect contact personnel position, and unfilled direct contact positions. A format for recording this data as it was collected was developed by ORI and approved by the Bureau of the Budget.

REVIEW OF DATA AVAILABILITY

- 1.2 The data collection effort did not produce all of the data desired, generally because data was frequently unavailable at state special education levels, or if available, was not easily accessible. Although previously discussed in the description of Task 6 results (Section V of this Part A), the availability of individual data elements may be summarized as follows:
 - a. Age ranges by handicap group and education level were usually available, although in the case of some handicap conditions (TMR and emotionally disturbed, for example), the age/level structure was artificial.
 - b. Special education programs as such were not always definable in the state's educational structure. Residential and itinerant (including homebound instruction) programs were easily identifiable, but more subtle gradations were more difficult to distinguish.



- c. Aggregate enrollment data by handicap group was usually available for the public school system. For other state agencies, this data was more difficult to obtain unless each agency or institution was individually contacted. Private school data was rarely available, except where program approval was required by the State Special Education Agency and tuition was publicly funded. Breakdowns of enrollment data by education level and education program were occasionally available.
- d. Data on the <u>number of children on special education</u> waiting lists was not usually available; when it was available, the degree of confidence in its completeness was low. Usually, if waiting lists were maintained at the local level, this data was not transmitted to the state level.
- e. Data on the <u>number of children referred and waiting for diagnosis</u>, the <u>number of those children expected to need special education</u>, and <u>number of children not referred but believed to exist</u> was practically nonexistent except as created by the application of prevalence rates to the general education enrollment. In most cases, the prevalence rates applied were the national rates or modifications thereof.
- f. Personnel/pupil contact ratios were usually available.

 Some states have more refined ratios than others, but
 the general level of definition included ratios by handicap group.
- Personnel employment data by handicap group/occupation was not too reliable. This data was seldom available by reference to a statistical listing; instead, it was usually obtained by a review of state special education directories, classroom reporting forms, or an interpretation of related statistical data. As in the case of enrollment data, employment numbers from other state agencies or private schools were most difficult to obtain within the survey time frame. Information on employee education level was quite incomplete and, when available, it usually came from an automated personnel data file printout.



h. Counts of personnel not in direct contact with handicapped children and counts of unfilled direct contact positions were data elements to which the state special education agencies could seldom respond because of lack of data from the local level.

ESTIMATION OF CURRENT MANPOWER REQUIREMENTS

- 1.3 The data collected in Task 6 was used as a basis for the calculation of current manpower requirement estimates. Those specific data elements necessary to this calculation were:
 - Enrollments plus waiting lists when data was available, by handicap group, education level, and education program
 - Personnel/pupil contact ratios, by handicap group, education level, and education program.
- 1.4 The personnel/pupil ratios were applied to the appropriate handicap group population enrollment data and the estimated personnel requirements were calculated. These personnel estimates for each state are shown in the Special Education Personnel Estimation Requirements/Employment Comparison Table contained in this appendix.

STATE DATA SUMMARIES

- 1.5 The data that was collectible during the survey visit to state special education agencies is presented separately for each state in a series of tabulations in the following pages of this appendix. The content of each state set of tabulations is as follows:
 - a. Overview of Special Education Programs

This table contains a breakdown, by handicap category, of the age ranges for each of the education levels that the state recognizes. It also gives an indication by handicap category of the education program available in the state.

The Handicap Code shown in the left-hand column serves as a cross-reference between this table and the other tables that apply to each state, as well as to the tables of data for other states. Thus, for instance, H9 refers to the educable mentally retarded category for education level, education program enrollment, and personnel/pupil contact ratios within a state set of tables as well as to other states data.

b. Enrollments in Special Education

The tabulation presents the special education enrollment by handicap category, education level (when available), and education program. Any available waiting list data is also shown on this tabulation.

c. Personnel/Pupil Contact Ratios

This table shows, for each handicap category, the personnel/pupil contact ratios by education level (when available) for each occupation directly involved in the instruction of the children.

d. Special Education Personnel Estimated Requirements/ Employment Comparison

These tables show both actual employment and estimated requirements by special education occupation. An "x" in the column headed "Certified" indicates that the state has established formal special educational/experience criteria that personnel must satisfy before they can be certified to perform that job function. A blank in this column indicates that the state has not acknowledged formally on special education certification requirements.

LIMITATIONS TO THE CALCULATION OF ESTIMATES

- 1.6 Data, when available, was either entered by personnel education level or by total for each personnel type and education level served, depending upon the detail contained in the source material. The estimated employment was calculated only for total personnel by personnel type and education level served.
- 1.7 The calculation of personnel requirement estimates was based solely on the correlation of collected data. For example, if the enrollment in a handicap category was known by education level and the personnel/pupil contact ratio was known for that level, an estimate of manpower requirements by education level was made. If enrollment was known only by total handicap category and the personnel/pupil contact ratio applied only to the total category, an estimate for the total category was made. However, if enrollment was by total category and personnel/pupil contact ratios were provided for different education levels, no estimate was made, since it was not feasible to make an assumption as to the content of the total enrollment by education level.
- 1.8 Estimates have been calculated whenever possible, even though enrollment data was not complete. Such estimates are identified by footnote.



State Name: Alabama

Overview of Special Education Programs

Data Period 1968_1969

- landad

		Edu	Education Level (Age	evel (Ag	je Ranges)	(Se		Education	1	Program	z.		
Handicap Code	Handicap Category 1/	Preschool	Elementary	Secondary	All Grades	Institution All Grades	Residential Special Class	Special	Day Special	Cooperative Class	gesontce Resource	Itinerant	٠,
H-1	Blind		6-12	13-21	6-21		×		×		×		
Н-2	Pertially Signted		6-12	13-21	6-21				×		×		
Н-3	Visually Handicapped												
H-4	Deaf	3-5	6-12	13-21	6-21	6-23	×		×				
H-5	Hard of Hearing	3-5	6-12	13-21	6-21				×				
9-H	Hearing Handicapped		•							_			
Н-7	Emotionally Disturbed	3-5	6-12	13-21					×		×		
H-8	Mentally Retarded										•		
н-9	EMR		6-12	13-21	4-26 -		×	×	×	×			
H-10	TMR		6-12	13-21	5-26	4-21	×	×	×				
Н-11	MR (Custodial, Severe, Institutional)												
H-12	Speech Handicaps					6-21						×	
H-13	Speech and Hearing						- :						
H-14	Special Learning Disabilities					6-21			×	×	×		
H-15	Brain Injured												
91-H	Physically Handicapped					6-21			×			×	
H-17	Homecound		_			6-21						×	
													Ala
1	1/ If no entry is shown, category is not app	icable 1	not applicable to the state	ate						•			bam
ĭ	}	,))	}									a

Enrollments In Special Education

State Name: Alabama

Data Period 1968-1969

đ			Enrollme	nts By Spec	Enrollments By Special Education Program Type	on Program	Type	
Handiea Code	Handicap Category	Education Level	Residen- tial Special Class	Special Schools	Day Special Class	Itinerant	Estimates of Believed To Exist	Waiting List
HI	Blind	Elementary			8			
		Unspecified	202					
H2	Partially Sighted	Elementary			30		J	
H4	Deaf	Elementary	396		32			\$ 51 *
		Secondary	55		32		5406	<u></u>
HS	Hard of Hearing	Elementary			14			
		Secondary			14			
H7	Emotionally Disturbed	Elementary			56		18020	
Н9	Educable Mentally Retarded	Preschool	•	22				
		Elementary		722	4130			
		Secondary		88	1806			
		Unspecified	304				18020	* 002
H10	Trainable Mentally Retarded	Elementary			420) 2703 ·	
		Secondary			240		7	
H12	Speech Handicaps	Unspecified				0006	31535	
H14	Special Learning Disabilities	Unspecified			20		9010	
H16	Physically Handicapped	Unspecified			992		4505	
		•						
	•							
А *	Data for institutions only							



		Itinerant																		1/75					1/8	
69		Resource Room		1/12								•		1/10	1/12						1/15	1/15				
Data Period 1968 - 1969	am Types	Coopera- tive Special Class															1/15					1/15				
ata Perio	ion Progr	Day Special Class	1/8	1/12	1/10	1/15	1/5	1/8	1/12	1/8	1/10	1/15	1/5	1/6	1/8	1/10	1/10	1/10	1/10		1/10	1/15	1/10	1/12		
Q	Special Education Program Types	Special Schools														1/15	1/15	1/10	1/10							
	Speci	Residen- tial Special Class	1/5	1/15				1/8	1/8							1/10	1/10	1/10	1/10							
act Ratio		Fducation Level	Elementary	Secondary	Elementary	Secondary	Preschool	E le me ntary	Secondary	Preschool	E le me ntary	Secondary	Preschool	E le me ntary	Secondary	E le me ntary	Secondary	E le me ntary	Secondary	All Grades	Elementary	Secondary	Elementary	Secondary	All Grades	
Personnel/Pupil Contact Ratio		Occupation	יים ליי בם 17		Teacher		Teacher (Deaf and Severely	Hard of Hearing)		Teacher (Deaf and Severely	Hard of Hearing)		Teacher			Teacher (Mentally		Teacher (Mentally	Retarded)	Speech Therapist	Teacher		Teacher			
State Name: Alabama		Handicap Category	Blind		Partially Sighted	•	Deaf			Hard of Hearing			Emotionally Disturbed			Educable Mentally	Retarded	Trainable Mentally	Retarded	Speech Handicaps	Special Learning Disa-	bilities	Physically Handicapped			
Sta	đ	Handica Code	H1		H2		H4			HS			H7			6H		H10	_	H12	H14		91H			

Alabama

Esti-mated Employed Data Period 1968-1969 9 10 97 œ 82 7 31 6 ~ Total 7037 न्ग <u>~</u> تنا 7 Esti-mated Employed Unspecified 9 6 10 6 ~ 1 17 ्रा ો Esti-mated Employed mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded Uk - Unknown 2 Secondary Education Level Ξ Employed 82 97 79 Elementary Esti-mated Employed mated 59 1/ Based on enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable Preschool Certified Degree Level Uncert. None Total Totai Total Total Total Total None MA MA ¥. Ωķ BA Ģ BA BA BA BA Employment data unavailable A=Aide O=Other O/Psychologist for Hearing Handicapped O/Vocational Teacher for Hearing Handicapped Th/Hearing Handicapped T/Hearing Handicapped State Name: Alabama Occupation T/Partially Sighted Th=Therapist T=Teacher T/Blind A/Blind

<u>Alabama</u>

Occupation		pə				Educ	Education 1	Level						
T≈Teacher A≖Aide	Degree	1373	Preschool	hool	Eleme	Elementary	Seco	Secondary	Ung	Ungraded	Unspecified	cified	Total	12
ist	Level	Cer	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Émployed
O/Audiologist for Hearing	BA	×										-1		-
Handicapped	Total										77	1	17	-
T/Emotionally Disturbed	BA	×										2		2
	MA	×										4		4
	Total				4 3/	/ 5					77	9	43/	9
T/Mentally Retarded	Uncert.					30		25						55
•	BA	×				338		89				5		311
٠.	MA	×		2		79		51				8		123
	ğ	×				20		11						31
	Total		17	2	4703/	350	2103/	155		_	30	11	7103/	518
Th/Speech for Mentally Retarded	BA	×										7		-
	MA	×										1	, (-
	Total										77	2	77	2
O/Vocational Teacher for	BA											1		-
Mentally Retarded	MA											-	1	-
	Total										7]	2	77	2
O/Psychologist for Mentally	È	×										1		1
Retarded	Total									_	77	1	7	1
O/Instructor for M.B.	ă										7	5	2/	5
Th/Dhustes for Montally Bo-	BA	×										9		9
tarded & Physically Handicapped MA	MA	×										3		3
1/ Based on enrollment data only (no waiting	no wai	ting		ist data available)		્ર હ	lculatio	Calculations incomplete due to missing data	lete due	to missing	g data			
2/ Calmiations cannot be made due to missing data	due to m	issin				<u>4</u> 1	plovmen	Employment data unavailable	vailable					

Employed Data Period 1968 - 1969 38 14 7 14 19 15 18 Total 2 12 Esti-mated 7 7 બૉ 120 Esti-mated Employed 14 Unspecified 14 19 2 18 ગ ો 77 न्य 120 Esti-mated Employed Esti-mated Employed Esti-Employed Ungraded Secondary Education Level 38 12 Elementary ो Esti-mated Employed Preschool Certifica × Degree Level Uncert. Uncert. Total Total Total Total Total Total MA MA MA MA ğ BA BA BA ğ BA T/ Special Learning Disabilities Physically Handicapped A=Aide O=Other O/Vocational Rehabilitation T/Physically Handicapped O/Social Worker for the State Name: Alabama Occupation Th/Physical (cont.) Counselor Th=Therapist T=Teacher Th/Speech

Alabama

Based on enrollment data only (no waiting list data available)

Calculations cannot be made due to missing data
 Uk - Unknown

ERIC

Data Period 1968-69

Overview of Special Education Programs

State Name: Alaska

		Educatio	Education Level (Age	lye Ranges	(se		Education		Program	ε	
ebo⊃	Handicap Category $^{1}\!$	Ungraded				Residential	Day Special	Itinerant	etste to tuO	-	
	Blind	5-18					X		X		
2-Н	Partially Sighted	5-18					×				
H-3	Visually Handicapped										
H-4	Deaf	5–18					×		×		
H-5	Hard of Hearing	5-18					×				
9-H	Hearing Handicapped										
H-7	Emotionally	5~18	_		٠		×		×		
H-8	Montally Petarded										
H-9	EMR .	5-18					×				
H-10	TMR	5-18			·		×				
H-11	MR (Custodial, Severe, Institutional)	5-18		,		×					
H-12	Speech Handicaps		_								
H-13	Speech and Hearing	,				•					
H-14	Special Learning Disabilities										
H-15	Brain Injured										
H-16	Physically Handicapped										
н-17	Homebound										Ala
H-25	Other Health Impaired	5-18			Ì			×			
H-26	Ortho and Neuro Handicapped	5-18					×		×		
_											
17	If no entry is shown, category is not app	s not applicable to the state	e state								
		•									



Waiting List Data Period 1968-69 Enrollments By Special Education Program Type Out of State 8 6 Itinerant 87 Day Special Class 35 144 190 က 62 221 561 Enrollments In Special Education Residen-tial 40 Orthopedically and Neurologically Unspecified Unspecified Education Ungraded . Level Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Handicap Category **Emotionally Disturbed** Other Health Impaired MR (Institutionalized) Partially Sighted H-5 | Hard of Hearing State Name: Alaska Blind Deaf EMR TMR 97-H H-10 H-25 H-11 dandicap Gode H-7 H-9 H-2 H-4 H-1

Alaska

Data Period 1968-69 Special Education Program Types Special Class 1/10 1/10 1/10 1/15 1/10 1/10 1/10 Day Education Level Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Personnel/Pupil Contact Ratio Special Education Teacher Teacher of Physically Occupation Handicapped Teacher Teacher Teacher Teacher Teacher Other Health Impaired Emotionally Disturbed Handicap Category State Name: Alaska Ortho and Neuro Handicapped Blind Deaf EMR TMR Handicap Code H-25 H = 10H-1 H-4 H-7 H-9

Employed 12 59 16 33 Data Period 1968-69 Total 295 હ્ય $25\frac{7}{2}$ $\sqrt{29}$ 13 Esti-mated Employed 16 12 9 59 S Unspecified ના Esti-mated Employed 4 41 Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded 25^{2} 262/ 73 13 Esti-mated Employed Secondary Uk - Unknown Education Level Esti-mated Employed Elementary Based upon enrollment data only (no waiting list data available) Esti-mated Employed Preschool Calculations incomplete due to missing data Calculations cannot be made due to missing data Employment data unavailable Certified Degree Level ď Uk Uk цķ цķ Uk ď Uk цķ A-Aide O-Other T/Physically Handicapped T/MR-Institutionalized T/Multiple Handicapped T/Emotionally Disturbed State Name: Alaska Occupation I/Partially Sighted T/EMR and TMR Th-Therapist T-Teacher Th/Speech T/Blind T/Deaf प्राज्य का I

Taranta A

I

l

Alaska

State Name: Arizona

Overview of Special Education Programs

Data Period 1968_1969

		Educatio	Education Level (Age Ranges)	Range	s)		Education	٠.	Program	E	
Handicap Code	Handicap Category $1/$	Elementary	Secondary		Un- graded	Residential Special Class	Special	Special Class in Regular Sch	Bound Bound		
H-1	Blind										
H-2	Partially Sighted										
Н-3	Visually Handicapped	6-14	15-18			×					
H-4	Deaf										
H-5	Herd of Hearing										
9-H	Hearing Handicappad	6-14	. 15-18			×					
H-7	Emotionally Handicapped				6-18		×	×		-	
8H	Montally Retarded	pre-ac inter 6-9 9-13	Jr. H. 13-15	Sr. H.			×	×			
H-9	EMR				·						
H-10	TMR	pre-pri 9-12	inter 111-15	reen age 14-20			×	X			
H-11	MR (Custodial, Severe, Institutional)	E-11 adv 6-11 10-15	15								
H-12	Speech Handicaps	6-14	15-1	-18							
H-13	Spacch and Hearing					•					
H-14	Special Learning Disabilities										
H-15	Brain Injured										
H-16	Physically Handicapped $2/$	6-14	15-1	81			×	×			Ar
H-17	Homebound	,			6-18				×	·	izo
											na
			.								
							·				
1/ If	If no entry is shown, category is not applic	t applicable to the state	tate	,						•	٠.
2/ In	Includes Special Learning Disabilities	•									

Data Period1968 -1969

Enrollments In Special Education

State Name: Arizona

			Enrollme	ents By Spe	Enrollments By Special Education Program Type	tion Progra	ım Type	
Handical Code	Handicap Category	Education Level	Residential Special Class	Special Schools	Special Class in Regular School	Home Bound		Waiting List
		Elementary	70					
н-3	Visually Handicapped	Secondary	50					
	•	Elementary	197					
9-H	Hearing Handicapped	Secondary	87				:	
H-7	Emotionally Disturbed	Ungraded		13	157			
		Elementary		22	3506			
H-9	EMK	Secondary			1338			[7]
H-10	IMR	Elementary		171	590			'BL
		Elementary		24	165			7111
H-16	Physically Handicapped	Secondary	,		7.1			WA
;		Elementary				339		TO
и-т /	Homebound	Secondary				385		N
		!						
	•							
				•				
				•				

Arizona



Personnel/Pupil Contact Ratio

Arizona

State Name:

Data Period 1968-1969

Special Education Program Types Home-1/2 1/5 Special Class in Regular Schools 1/6-1/15 1/6-1/15 1/8-1/15 1/8-1/15 1/6-1/15 1/6-1/15 1/5-1/10 1/5-1/10 1/6-1/12 1/6-1/12 1/5-1/10 1/5-1/10 1/5-1/8 1/5-1/8 Special School 1/17 Educ**ati**on **Lev**el Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Preschool Ungraded Occupation Teacher Teacher Teacher Teacher Teacher H-16 Physically Handicapped **Emotionally Disturbed** Handicap Category H-17 Homebound EMR H-10 TMR H-9 H-7 Handicap Code

Arizona

State Name: Arkansas

Overview of Special Education Programs

Data Period 1968. - 1969

I

1

l

Ī

	,																,			A	rka	nsas
E	Itinerant			•									×				×				-	
Program	F ssource														×							
1 1	Day Special						×	×		X	×				×		×					
Education	Special														×		×					
	Residential			×			×	×		X	×											
s)																			!		,	
e Ranges)	Ungraded			6-18									6-18				6-18					·
Education Level (Age	Secondary			13-18			13-18	13-18		13-18	13-18				13-18	-	13-18					ite.
ation L	Elementary			6-12			6-12	6-12		6-12	6-12				6-12		6-12					the sta
Educ	Preschool						4-5								2.5-5							icable to
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Mentally Retarded	EMR	TMR (contains some Severe)	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Hom∋bound				If no entry is shown, category is not applicable to the state
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-н	H-10	н-11	H-12	H-13	H-14	H-15	91-H	H-17				1/ II



Esti-mated Employed 332 89 48 12 36 Data Period 1968 -1969 47 48 Total 11-293/ 312-438 76-152 .13 - 32145 Esti-mated Employed Unspecified Esti-mated Employed Esti-mated Employed 7 Ungraded Special Education Personnel Estimated Requirements/Employment Comparison 11-29 20 32 71 14 Secondary Education Level 78 77 Esti-mated Employed 20 48 12 22 16 23 261 29 Elementary 234-438 76-152 13-32 21 9 1/Based upon enrollment data only (no waiting list data available)
2/Calculations cannot be made due to missing data
3/Calculations incomplete due to missing data
Uk-Unknown Esti-mated Employed Preschool Certified Degree Level ď ă g Š ä 눔 ď O/Speech & Hearing Clinician T/Deaf and Hard of Hearing A-Aide O-Other T/Physically Handicapped I/Emotionally Disturbed T/Visually Handicapped T/Learning Disabilities State Name: Arizona Occupation T/Homebound Th-Therapist T-Teacher T/EMR T/TMR

Arizona

ERIC Full Text Provided by ERIC

Data Period 1968-1969

Enrollments In Special Education

٠.;			Enrollme	nts By Spec	ial Educat	Enrollments By Special Education Program	Type		
Handica Code	Handicap Category	Education Level	Resident	Special	Day Special	Resource	Itinerant	Waiting List Incomplete	
	Visually Handicapped	Elementary	105						
	· ••	Secondary	59						
		Ungraded	6		٠				
	Hearing Handicapped	Preschool	22					18	
		Elementary	192		_ 7				
		Secondary	100						
		Unspecified						18	
	Emotionally Disturbed	Secondary	95		25			145	•
	Mentally Retarded	Unspecified						783	
	EMR	Elementary	102		3180				
	•	Secondary	217		840				
	TMR	Elementary	190	134	80				
	•	Secondary	403				•	•	
H12	Speech Handicaps	Ungraded					3900		
	Special Learning Disabilities	Preschool		200					
		Elementary		150	12	360			
		Secondary				20			
91H	Physically Handicapped	Elementary		10	58				
		Secondary			32				
		Ungraded					170	AL	Ar.
								KOI	kan
								150	sá
હ	Supplied by Residential Schools only			-					s

State Name: Arkansas

Contact Ratio

Data Period 1968-1969

Personnel/Pupil Contact Ratio

Resource Itinerant 1/100 Special Education Program Types Special 1/6-10 Day 1/15 1/15 7 1/8 Resident Special 1/8 1/50 est 1/10 1/10 1/10 1/12 1/12 1/12 1/12 वर्ग 1/10 1/8 1/8 1/8 1/8 Elementary Elementary Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Preschool Secondary Secondary. Secondary Secondary Education Ungraded Ungraded Ungraded Ungraded Ungraded Level Teacher/Institution Teacher/Institution Teacher/Institution Occupation Thefapist/Colony Teacher/Colony Teacher/Colony Teacher/Colony Therapist Teacher Teacher Teacher Teacher Aide Aide Emotionally Disturbed Visually Handicapped Handicap Category Hearing Handicapped Speech Handicaps EMR IMR H-10 H-12 H-7 H-3 9-H H-9 Code Hendicap

Arkansas

Arkansas

State Name:

Personnel/Pupil Contact Ratio

Resource Itinerant 1/30 1/1 Data Period 1968 - 1969 Special Education Program Types 1/15 1/15 Special Day 1/10 1/25 1/10 1/25 Special 1/25 1/25 1/10 1/25 Resident Education Elementary Elementary Elementary Elementary Elementary Secondary Secondary Level Preschool Ungraded Ungraded Therapist/Occupational Teacher/Homebound FT Teacher/Homebound PT 0=Other A=Aide Therapist/Physical Occupation Th=Therapist T=Teacher Teacher Teacher Aide Physically Handicapped Handicap Category State Name: Arkansas Special Learning Disabilities H-16 H-14 Handicap Code

Arkansas



Employe Data Period 1968-1969 유 53 25 18 S 33 32 40 Total 744 27 33 31 Employed Calculations incomplete due to missing data. Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ 40 13 32 Ungraded Esti-mated ရွ Esti-mated Employed 2 က Secondary Education Level 41 21 20 Employed 25 10 10 15 21 Elementary Esti-mated 10 27 24 Based upon enrollment data only (no waiting list data available). Employment data unavailable. Ca!culations cannot be made due to missing data. Preschool Esti-mated Employed Certified None Degree Level None None None None Total Total Tota1 Total Total M M BA MA BA BA T/Special Learning Disabilities A=Aide O=Other State Name: Arkansas Occupation Th/Colony, Speech I/Colony, IMR I/Colony, EMR Th=Therapist T=Teacher Th/Speech T/TMR ने श्रे श

Arkansas

ERIC Full Text Provided by ERIC

Esti-mated Employed Data Period1968 -- 1969 ä 16 57 6 268 215 27 52 14 Total 6 32 32 32 268 Calculations incomplete due to missing data. Employed Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison $1/\sqrt{1}$ Ungraded Esti-mated Esti-mated Employed 10 10 49 26 13 23 6 က Secondary Education Level 41 10 26 Esti-mated Employed 7 7 16 30 뭐 Elementary 166 212 45 6 20 212 32 32 Based upon enrollment data only (no waiting list data available). Preschool Esti-mated Employed Calculations cannot be made due to missing data. Certified Degree Level None Total Uncer-Total Total None Total Total Total A A MA ¥ Ψ M BA B M Æ $\frac{2}{3}$ Employment data unavailable . $\frac{3}{3}$ Calculations cannot be made du λ,=Aide O≃Other T/Emotionally Disturbed A/Emotionally Disturbed T/Visually Handicapped A/Visually Handicapped State Name: Arkansas T/Hearing Handicapped Occupation I/Colony, EMR Th=Therapist T=Teacher T/EMR

Arkansas

Esti-mated Employed Data Period 1968-1969 20 44 Totaî 39 184 Esti-mated Employed Unspecified Esti-mated Employed Esti-mated Employed 40 Special Education Personnel Estimated Requirements/Employment Comparison 1/40 Ungraded 175 न Secondary Education Level Esti-mated Employed Elementary 31 30 Based upon enrollment data only (no waiting list data available). Esti-mated Employed Preschool Degree Level None Total Totai Total Total Total MA MA MA A A BA Employment data unavailable. A/Special Learning Disabilities I/Special Learning Disabilities A=Aide O=Other T/Physically Handicapped State Name: Arkansas Occupation Th/Occupational T=Teacher Th=Therapist Th/Physical ┧

Arkansas

	·													,		_C	a lif	orn:	ia .		 		_
											j	Ì		Ì		Ì		Ì					1
	Teleciass			.													×				 -		
Program	Itinerant		×											•					·				
	уоош Кезо <i>п</i> тсе		×											×			×			×			
Education	Day Special	×			×	_				×	×						×			×		4.2	
į	Residential School	×			×	-				×	×						×		×				
s)																							
e Ranges)	Unspecified													6-21					5-21		•	ies.	
Level (Age	Secondary	13-21	13-21		15-20					15-20	15-21						15-20		}	15-20	state.	special learning disabilities	
Education I	Elementary	5-12	5-12		5-14					6-14	6-14						5-14			6-14	to the sta	earning (
Edu	Preschool	3-4	3-4		3-4												3-4				applicable t	pecial le	
	Handicap Category 1/	Blind	Partially Sight∈4	Visually Handicapped	Deaf and Severely Hard of Hearing	Hard of Hearing	Hearing Handicapped	Emotionally	Mentally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped *	Homecound	Multiple Handicapped	Educationally Handicapped **	If no entry is shown, category is not appl * Includes other health impaired.	** Includes emotionally disturbed and s	
	Handicap Sode	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	Н-17	H-18	H-21	 1/ If		



Waiting 79856 List thcomplete Most of data Data Period 1968 - 1969 33000 пикломп Enrollments By Special Education Program Type Program Part time 935 Ппкпомп 158751 Itinerant Special Class 1739 997 2220 1099 7578 1145 Enrollments In Special Education Day Зсроој 1328 2 126 10 840 578 380 1160 77 lsit Residen-Unspecified Unspecified Unspecified Unspecified Unspecified Education Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Preschool Deaf and Severely Hard of Hearing Preschool Preschool Level Orthopedically H.C. and Other Trainable Mentally Retarded Educable Mentally Retarded Educationally Handicapped Health Impaired (Physically Handicapped) Handicap Category Multiple Handicapped Speech and Hearing California Partially Sighted State Name: Code H10 H16 H18 H13 H21 H4 Handicap H 扫

[ejecjasa Data Period 1968-1969 Special Education Program Types 1/18 1/15 1/20 Itinerant Воот 1/14 1/16 1/24 1/32 кезопсе Day Special Class 1/10 1/16 1/10 1/10 1/20 1/30 1/12 1/16 1/10 1/10 1/10 1/12 1/15 1/14 1/12 1/14 1/8 Residen tial School 1/16 1/10 1/12 1/12 1/14 1/8 1/6 1/8 1/6 1/8 Elementary Elementary Elementary Elementary Elementary All Grades All Grades Elementary All Grades All Grades Education Secondary Secondary Secondary Secondary Secondary Secondary Preschool Preschool **Preschool** Preschool Preschool Preschool Personnel/Pupil Contact Ratios Level Occupation Teacher Instructional Aide Speech Therapist Attendant Educationally Handicapped Teacher Teacher Teacher Deaf and Severely Hard of | Teacher Teacher Teacher Aide Orthopedically H.C. and Other Health Impaired (Physically Handicapped) California Handicap Category Speech and Hearing Trainable Mentally Educable Mentally Partially Sighted Retarded Retarded Hearing State Name: Blind H16 Handicap Code H10 H21 H2H4 H_9

ERIC Full Text Provided by ERIC

H

Employe Data Period 1968-1969 770 1481 439 802 793 Total Esti-mated 15^{2} $705^{2}/$ 4611 2074 393 Employed 254 602 793 430 631 1481 Unspecified Esti-mated Employed mated 2074 Employment data unavailable. Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Employed mated Employed কা Uk - Unknown Secondary Education Level <u>1</u>5 10662/157 14 22 Elementary 132/ 35452/ 9 379 382 Based upon enrollment data only (no waiting list data available). Employed 168 171 Preschool Esti-mated Calculations cannot be made due to missing data. 1662/ Calculations incomplete due to missing data. Certified Degree Level None ğ Total ğ Ωķ Ħ T/Orthopedically Handicapped A=Aide O=Other State Name: California T/Visually Handicapped T/Mentally Retarded Occupation Th=Therapist Th/Speech T=Teacher T/Deaf A/TMR બ્ર જ 1-29

- Carry

Data Period 1968 - 1969

Overview of Special Education Programs

State Name: Colorado

	·																	oio	rad	o	
	Itinerant																				
c	Resource Resource			·																	,
Program	Cooperative Special Class																				
1 1	Special Special					-		ζ,	20								_				
Education	Residential								\$ S	280	٨.										
		_									* PC	ŶO\$									
														_							
e Ranges)	Ungraded			3-21			3-21	5-21		5-21	5-21		3-21			_		3-21			· •
Education Level (Age	Secondary			13-18			13-18	13-18		13-18	13-18		13-18					13-18			state.
cation I	Elementary			6-12			6-12	6-12		5-12	5-12		5-12					5-12			to the
Edu	Preschool			3-5			3-5														olicable
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped (Aurally)	Emotionally Disturbed (includes SLD)	Mentally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound			If no entry is shown, category is not applicable to the state.
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	L-H	H-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17			17

Enrollments In Special Education

State Name: Colorado

Data Period 1968-1969

										_,			•	٠.,					- ,	ç	<u> 2010</u>	rac	lo ,	
	Waiting List						Ε	₽BI	ÆΙ	VΑ	IOI	1	٠											
Type	Itinerant			06		9	7	25	452		79			٠				17,102	452		79			
on Program	Resource Room							14	1405	312	85								14.05	312	85			
ial Educati	Coopera- tive Special Class	43	30		10	254	52	35	629	151	47		4097	2963	56				629	151	47			
Enrollments By Special Education Program Type	Special Schools	5	3	7	1	28	9	8	134	35	6	244	290	182	9	889	331	159	134	35	6			
Enrollme																								
	Education Level	Elementary	Secondary	Unspecified	Preschool	Elementary	Secondary	Unspecified	Elementary	Secondary	Unspecified	Preschool	Elementary	Secondary	Unspecified	Unspecified	Unspecified	Unspecified	Elementary	Secondary	Unspecified			
	Handicap Category	Visually Handicapped			Hearing Handicapped				Emotionally Disturbed			EMR				TMR	Mentally Retarded	Speech Handicaps	Physically Handicapped					
ďe	Handic	H3			9H	_			H7			6H				H10	HII	H12	91 H					

}.

1/5-1/10 |1/5-1/10 |1/10-1/15 Itinerant 1/5-1/10 1/5-1/10 1/10-1/15 1/5-1/15 1/5-1/15 1/5-1/15 Data Period 1968-1969 Resource Special Education Program Types 1/12 1/4-1/8 \leq Room Special tive Schools Special F Class 1/4-1/8 1/5-1/8 1/12 Education Level All Grades Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Physically Handicapped **Emotionally Disturbed** Visually Handicapped Hearing Handicapped Handicap Catr lory Colorado **Mentally Retarded** Speech Handicaps State Name: EMR TMP Handicap Code H10 H12 HII

Colorado

Emr loyed 815 302 47 Data Period 1968-1969 Total 11-33 ²/₄₀₋₉₆ ²/ 298-5794 7 ZN-68 Employed 189 815 302 47 Unspecified 7 6-18 Esti-mated **Employed** Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded 17 11-1 4 7-12 <u>2</u>/4 <u>4</u> 19-34 <u>2</u>/ Esti-mared Esti-mated Employed Secondary Education Level Uk ~ Unknown <u>√2</u>11-9 1/2 9-2 4/46-93 2 4/370-593 Esti-mated Employed Elementary 3-9 2/ 26-51 2/ 233-452 4/512-819 Based upon errollment data only (no waiting list data available)
 Calculations incomplete due to missing data
 Calculations cannot be made due to missing data
 Emoloyment data unavailable by education level Esti-mated Employed Preschool 1-2 2/ Degree Level 肖 T) ş ğ Ħ ន័ A=Aide O=Other T/Physically Handicapped T/Visually Fandicapped T/Emotionally Disturbed T/Hearing Handicapped State Name: Colorado T/Mentally Retarded Occupation T=Teacher Th=Therapist T/EMR

-1			Γ	Γ-		<u> </u>	<u> </u>									_		Cor	ne	ctic	cut		
	[tinerant						×								×								
m	goom gesontce						×	×							×								
Program	Integrated Cooperative						×			×			Х		×								
	Day Special Class						×	X		×		,			×		×						
Education	Special						X	Х									×			_			.,
	Residential						X	X					X	•			×						
s)	:																					·	
Ranges)																						•	
Level (Age	Secondary						3-21	3-21		12-12	12-12						16-21					tate	
Education I	Elementary						3-21	3-21		91-9	6-16						5-21					the start	
Educ	Preschool						3-21	3-21		4-6	4-6						4-6					applicable to the state Handicapped	
	Handicao Category 1/	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps $^{2/}$	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Perceptually Handicapped			If no entry is shown, category is not app Legislation considers part of Physical Ha	
	Handicap Sode	H-1	H-2	H3	H-4	H-5	9-H	H-7	8-H	6-E	H-10	H-11	H-12	H-15	H-14	H-15	H-16	H-17	H-27			1 /2 2 /2	

I



Connecticut 230 180 314 Homeponuq Data Period 1968-69 Integrated Resource Coopera- Room tive Enrollments By Special Education Program Type 228 110 387 10 429 15,000 1690* 10,230* 115 009 160 160 160 Day Special Class * Combined figures for Day Special Class and Integrated Cooperative Residen- Special tial Schools 70 Enrollments In Special Education 127 422 26 40 9 13 Unspecified Unspecified Unspecified Elementary Elementary Education Elementary Elementary Preschool Secondary Preschool Ungraded Preschool Ungraded Level No waiting list data available Special Learning Disabilities Perceptually Handicapped Handicap Category Physically Handicapped **Emotionally Disturbed** Hearing Handicapped State Name: Connecticut Speech Handicaps EMR H-16 H-14 H-12 H-27 **Sode** 1-H 9-H 6-H Handicap

I

Connecticut /2-1/6 Resource Home-Room bound Data Feriod 1968-69 Special Education Program Types 1/9 1/6-1/8 1/6-1/8 Special Class 1/16 1/18 1/18 1/16 1/20 1/24 1/12 1/12 1/10 1/10 1/14 Day 1/6 Special School dential 1/6 1/6 1/6 1/7 Resi-Education Elementary Elementary Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Secondary Secondary Secondary Preschool Secondary Preschool Preschool Level Preschool Ungraded Preschool Personnel/Pupil Contact Ratio For towns having more than 3000 school age children ** For towns having less than 3000 school age children Teacher with Aide** Teacher with Aide* Teacher with Aide* Teacher with Aide Teacher with Aide Occupation Teacher** Teacher** Teacher* Teacher* Connecticut **Emotionally Disturbed** Handicap Category Hearing Handicapped State Name: EMR TMR * Handicap Code H-id 6-H 9-E H-7

Connecticut 1/12 1/15 1/15 Homeponnoq Resource 1/15-1/2 1/12 1/15 Coopera-Room Data Period 1968-69 Special Education Program Types 35-1/40 tive*** 1/15 grated inte-Day Special Class 1/12 1/12 1/12 1/8 Special Class 1/15 1/12 /12 8 Resi-dential 1/12 1/12 Inspecified Unspecified Inspecified Unspecified Inspecified Education Inspecified Elementary Secondary Level Personnel/Pupil Contact Ratio ** For towns having less than 3000 school age children Teacher with Aide** No data for this program on preceeding page Teacher with Aide Teacher with Aide Occupation Clinician Teacher Teacher Aide Perceptually Handicapped Physically Handicapped State Name: Connecticut Handicap Category Speech Handicaps *** 1-10 TMR H-16 H-12 H-27 Handicap Code

Esti-mated Employed 136 30 100 440 a 9 10 97 20 20 50 12 250 18 22 13 Data Period 1968-69 Total 379-432 2 બો 149 216 110 47 22 Esti-mated Employed 440 136 10 18 22 13 2 30 97 00 20 8 2 20 12 250 Unspecified 21 149 47 20 Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Esti-mated Employed ન ના Secondary Education Level 375-423 214 Esti-mated Employed નો Elementary 13 508 Based upon enrollment data only (no waiting list data available) Calculations cannot be made due to missing data Employment data unavailable UK - Unknown Esti-mated Employed 3 ન ન્હ્ Preschool 40 Certified Degree Level ğ ă Çķ цķ ğ Ħ Ħ š Uk ř Uk ă H ž 벍 ğ Üķ T/Hearing Handicapped with Aide O/Speech and Hearing Clinician A/Special Learning Disabilities T/Special Learning Disabilities A-Aidr O-Other T/Perceptually Handicapped A/Perceptually Handicapped State Name: Connecticut T/Physically Handicapped T/Emotionally Disturbed A/Emotionally Disturbed T/Hearing Handicapped A/Speech and Hearing Occupation T/EMR with Aide T/TMR and EMR A/TMR and EMR Th-Therapist T-Teacher A/EMR A/TMR T/TMR 크의의

Connecticut

ERIC*

State Name: Delaware

Overview of Special Education Programs

Data Period 1968-1969

	·		_	, ,						, ,						,				\underline{D}	<u>ela</u>	ware
	Itinerant																1					
E	Кезоитсе Везоитсе																					
Program	Cooperative Special																					
	рау Special																					
Education	Special						Q,	TQ1	در ۱													
	Residential								10 ₄	by	PQ.	O ₄										<u> </u>
[
Ranges)									,													·
(Age	/ Innuo o G						•	•	_		•			•			•					
Level	Secondary	13→					13→	13→		13→	13→			13→	13→		13→		13→			ta te.
Education Level	Elementary	7-12					7-12	7-12		7-12	7-12			7-12	7-12		7-12		7-12		<u> </u>	o the s
Edu	Leschool	4-6					4-6				4-6						4-6					icable t
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally & Socially Handicapped	Mentally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped (Orthopedic)	Homebound	Special Physical Problem (Ungraded)			If no entry is shown, category is not applicable to the state.
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	1Н	H-8	H-9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	н-17	H-24			1/1

Education Coopera- Level tive Itinerant Special Special Elementary Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded 145	State Name: Delaware		Eurollments In Special Education Eurollments By	Special Educat Enrollments	cation nts By Special	Data Periodly Special Education Program Type	Data Period1968-1969 Program Type	69
Elementary 15 Ungraded 45 Elementary 86 Elementary 1966 683 Elementary 1966 522 Ungraded 2639 2639 Elementary 145 164 Ungraded 145 145	Handicap Category		Education Level	Coopera- tive Special	Itinerant		No Program Break- down	Wailing List
Ungraded 45 Elementary 86 Elementary 1966 Ungraded 2639 2639 Ungraded 145 164 Ungraded 145 145 Ungraded 145 145	Blind		Elementary				15	
Elementary 86 Elementary 683 Elementary 1966 Ungraded 2639 2639 Elementary 145 164 Ungraded 145 145 Ungraded 164 164			Ungraded				45	
Elementary 1966 1966 Ungraded 2639 2639 Ungraded 145 164 Ungraded 145 145	Hearing Handicapped		Elementary				98	
Elementary 1966 1966 Ungraded 2639 2639 Ungraded 164 164 Ungraded 145 145	Emotionally/Socially Handio	dicapped					683	
Ungraded 2639 2639 Elementary 164 Ungraded 145 145 Ungraded 164 165	EMR		Elementary	1966			1966	
Ungraded 2639 2639 Elementary 145 164 Ungraded 145 145 Indicated 145 145 <t< td=""><td>TMR</td><td></td><td>Ungraded</td><td></td><td></td><td></td><td>522</td><td></td></t<>	TMR		Ungraded				522	
Elementary 145 145 Ungraded 145 145	Speech and Hearing		Ungraded		2639		2639	TE
145	Physically Handicapped (Ortho)	ho)	Elementary				164	∃ A -
A TOU	Special Physical Problem		Ungraded		145		145	IAV
								ΑŢ
								ОИ
		•						

Delaware



Data Period 1968-1969 Special Education Program Types <u>/80-1/10</u> grams 1/150 1/40 1/80 1/16 1/80 1/10 1/15 1/50 1/12 1/12 1/10 1/10 1/50 1/16 1/24 1/8 1/8 1/8 AII Education Level All Grades All Grades All Grades All Grades All Grades All Grades Elementary All Grades Secondary Preschool Ungraded Personnel/Pupil Contact Ratio Instr. Media Specialist Occupation Full-time Nurse Teacher/Braille Case Worker Specialists Specialists Counselor Teacher Teacher Teacher Teacher Teacher Teacher Nurse Aide Àide Aide Physically Handicapped Special Learning Disa-**Emotionally Disturbed** Hearing Handicapped Handicap Category (Orthopedically) Speech and Hearing State Name: Delawere bilities Blind TMR EMR Handicap Code H16 H10 H13 H14 9H HJ Н

Delaware

ERIC Full Text Provided by ERIC

Employed <u>M</u> 138 밁 Data Períod 1968-1969 199 29 7 33 17 22 Total Esti-mated 26-33 69 17 17 10 Employed 2 10 17 37 33 7 22 Unspecified *7*77 Pi 7 Esti-mated 26-33 10 44 Employed Special Education Fersonnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Esti-mated Employed ના 9 Secondary Education Level Uk - Unknown 26 33 Employed ल Elementary Esti-mated 36 15 92 10 Ŋ 15 ო Based upon enrollment data only (no waiting list data available). Employed Preschool Esti-mated Calculations cannot be made due to missing data. Certified Degree Level 肖 ř ă ă ğ ă Employment data unavailable. T/Orthopedically Handicapped A/Orthopedically Handicapped A=Aide O=Other T/Special Physical Problems O/Nurse for Orthopedically Handicapped State Name: Delaware T/Emotionally Disturbed T/Hearing Handicapped A/Hearing Handicapped Occupation O/Speech Clinicians O/Nurse for TMR Th=Therapist T=Teacher T/Blind I/IMR A/TMR T/EMR 7

<u>Delaware</u>

Overview of Special Education Programs

State Name: Florida

Data Period 1968-69

A American

Manager ...

[-remember]

. .

1

1

		Edu	Education Level (Age	evel (Ag	e Ranges)		Education	i	Program	e	
Handicap Code	Handicap Category $1/$	Preschool	Elementary	Secondary	All Grades	Residential Special	Special Class Class	Cooperative Class	Kesource	Itinerant	Unspecified Part-Time Program
H-1	Blind										
H-2	Partially Sighted										
H-3	Visually Handicapped *	3-5	6-12	13-21		×	×				×
H-4	Deaf **	3-5	6-15	16-21		×	×	×	×		
H-5	Hard of Hearing	3-5	6-12	13-21						×	
9-H	Hearing Handicapped										
L-H	Emotionally (Disturbed)	3-5	6-12	13-21		×	×		×		
H-8	Mentally Retarded										
6-H	IMR	3-5	6-12	13-21			×		×		
H-10	IMR	35	6-12	13-21			×				
H-11	M.R (Custodial, Severe, Institutional)										
H-12	Specch Handicaps				6-21					×	
H-13	Speech and Hearing										
H-14	Specific Learning Disabilities	3-5			6-21		×		×		
H-15	Brain Injured										
H-16	Physically Handicapped	3-5	6-12	13-21			×		×	×	
H-17	Hometound										orid
н-23	Socially Maladjusted			13-21		×					
						_					
* ;	* Called "Blind and Partially Sighted"				-						
*	Ŋ	plicable	not applicable to the state	state							
				;							

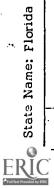


Date Period 1968-69

Enrollments In Special Education

ď			Errollments	nts By Special	iel Education	Progrem.	Type		
Handica Code	Handicap Category	Education Level	Resi- dential Special Class	Special School or Class	Coopera- tive Class	Resource Room	Itinerant	Unspeci- fied Part- Time Pro- gram	Walting List
Н3	Blind and Partially Sighted	Preschool	5						
		Elementary	29						
		Secondary	150						
		Unspecified		161				531	55
H4	Deaf and Severely Hard of Hearing Preschool	Preschool	166	210					
		Elementary	200	352		06			
		Secondary	159	63		38			
		Unspecified			20	6			127
H5	Hard of Hearing	Unspecified					1033		
H7	Emotionally Disturbed	Preschool	4						
		Elementary	26	740		722			30*
		Secondary	80	128		30			
		Unspecified		202					445
6Н	Educable Mentally Retarded	Elementary		7302		2651		-	
	·	Secondary		5474		1930			
		Unspecified		269		554			6223
H10	Trainable Mentally Retarded	Elementary		1462					
		Secondary		757					
		Unspecified		53					355
H12	Speech Handicaps	Unspecified					32809		11880
H14	Specific Learning Disabilities	Unspecified		443		959			781
		(continued)				-			
* Ins	* Institutional waiting list								

Ī



Eurollments In Special Education State Name: Florida

Transmitted to the second transmitted to the second transmitted to the second transmitted to the second transmitted to the second transmitted transmitted to the second transmitted transm

ľ

Late Period 1968-69

		i- kt- List					94		098					•						
		Unspeci- ited Part- Time Pro- gram		 							 		7			i		_	 	_
	<u>'</u> [ype	Itinerant					2927													
	on Program	Resource					34													
,	Errollments By Special Education Program Type	Coopera- tive Class													,					
	nts By Spec	Special School or Class		43	995	189	22													
	Fraollme	Resi- dential Special Class						1276		<u>-</u> -	-									
		Education Leve!	(continued)	Preschool	Elementary	Secondary	Unspecified	Secondary	Unspecified											
		Handicap Gategory		Physically Handicapped				Socially Maladjusted												
		Hendie Code		91H				H23				٠								

Florida

Data Period 1968-69

Personnel Contact Ratio

State Name: Florida

₫€				ais	scial Education	Special Education Program Types	SS
Handics Sode	Handicay Category	Occupation	Education Level	Resi- dential Special	Special School or	Resource	Itincrant
н3	Blind and Partially Sighted	Teacher	Preschool	CESTO	1/8		
			Elementary	1/7	1/10		
			Secondary	1/10	1/15		
			All Grades				1/20
		Peripatologist	All Grades				1/75
		Mobility Instructor	All Grades	1/15			
		Psychologist	All Grades	008./1			
		Physical Therapist	All Grades	1/300	-		
H4	Deuf and Hard of Hearing	Teacher	Preschool	1/8	1/8		1/12
HS		٠	Elementary	1/10	1/10		1/12
			Secondary	1/10	1/12		1/12
	,	Audiologist	All Grades	1/250			
		Psychologist	All Grades	1/250			
H	Emotionally Disturbed	Teacher	Elementary	1/5	1/15	1/15	
			Secondary	1/15	1/15	1/15	
6Н	Educable Mentally Retarded	Teacher	Preschool		1/12		Flo
			Elementary		1/15		
			Secondary		1/18		
H10	Trainable Mentally Re-	Teacher	Preschool		1/10		
	tarded		Elementary		1/10		
			Secondary		1/15		
			(continued)				
	•						



Data Period 1968-69

Personnel Contact Ratio

State Name: Florida

					. ـ ـ ـ ـ ـ											F	lori	ida			,,,,,,,,		
Itinerant				1/40	1/20				1/10														
Resource Room		1/75	1/75		1/20					1/35	1/35	1/75	1/75										
			,																				İ
Special School or Class					1/10	1/10	1/12	1/15															
Resi- dential Special Class														1/15									
Education Level	(continued)	All Grades	All Grades	All Grades	All Grades	Preschool	Elementary	Secondary	All Grades	All Grades	All Grades	All Grades	All Grades	Secondary									
Occupati o n													her										
O Handicay Category				2 Speech Handicaps	4 Specific Learning Disab.	6 Physically Handicapped		÷ 500 a.u.		gan a sort and		,		3 Socially Maladjusted									-
	Occupation Resi- Education dential Tevel Special Class	Handicap Category Handicap Category Continued) Hersi-Special School Class Class	Handicap Category Music Teacher Occupation Education Resi-Special Gential School Class Class (continued) Music Teacher All Grades	Hendicep Category Handicep Category Handicep Category Handicep Category Handicep Category Continued) Music Teacher Hand Grades Phys. Ed. Teacher Hand Grades	Decupation Education Resi- Special School Level Special School Class Handicap Category	Handicaps Cocupation Education Resi- dential Special School Music Teacher All Grades All Grades Continued) Class Speech Handicaps Speech Therapist All Grades Continued) Special Orsas All Grades Class Speech Handicaps Speech Therapist All Grades Specific Learning Disab. Teacher All Grades 1/10 Physically Handicapped Teacher Preschool 1/10	Handicaped Decupation Education Continued Special School Special School Special School Scho	Handicap Category Education Education Level Special School Class Handicap Category Education Education Continued Continue	Handicap Category Education Education Cocception Levei Class Class Class	Handicap Category Education Education Gential Special School Class Cla	Handicap Category Education Education Resi- Special School Class Handicap Category Physical Packacation Peducation Peducation Special School Special School Class C	Handicap Category Education Education Education Continued Special School Class Handicap Category Education Education Resi- Special School Levei Class Heardlean Category Peducation Residential School Resource Level School School Resource Itinerant School School Special School Special School School Indicates Indi	Heardleap Category Decugation Education Resin Special Resource Levei Special Class Hendicap Category Decigation Education Resi- Special School S	Hendlocal Category Coccipation Education Residue Category Levei Class Calass Handicap Category Peducation Peducatio	Handicap Category Countinued Education Education Education Countinued Countinued Countinued Countinued Countinued Countinued Countinued Countinued Countinued Live Liv	Hendices Category Deducation Deducation Teve Continued							
Special Education Personnel Estimated Requirements/Employment Comparison $^{ extstyle J}$ State Name: Florida

Data Period 1968-69

	State trame: Florida	obseres	1	ימרקרוז ד	CI SOUTHER	Stanlare	nedari en	icites/ p	J1031.15111	Special Laucation (etsonner Estanated Negarites) Employation Companies		100	Data rector 1960-69	1909 09	
	Occupation		pe ₁				н	Education	Level				•		•
	T=Teacher A=Aide		313	Preschool	looi	Elementary	ntery	Seco	Secondary	Ungraded	àà	Urspecified		i Total	3.
	Th= Therapist O=Other	Tevel	!	Esti-	Employed	Esti- mated	Einployed	Esti-	Employed	Esta- Esta-	Employed	Estin	"Lexorateg	: stl-	Employed
	T/Blind and Partially Sighted	Uncert											3	,	3
		Uk				9.6	3/						7.1		71
		Total] 	177		9.6	3	15	3			/7	74	<u>7</u>	74
	A/Blind and Partially Sighted	Uk	-			/ī	4							/2	
	O/Child Care Councelor for Blaps	ŭk	_										31	77	31
	T/Deaf and Hard of Hearing	BA											50		50
		MA									~		22		22
		Uk		47	22	55	99	17	8						95
		Total		47	22	55	99	21	8			86 1/	22	√ 602	167
1-4	A/Deaf and Hard of Hearing	ďk				/5	-								1
8	O/Psychologist	MA					-1							,	1
		Doc					7							****	7
_		Total				77	3					2.8	3/	3 1	3
	O/Social Worker	BA] 				5								Ľη
		MA					1								1
		Total				/7	9							77	9
	O/Audiologist	MA										23	7	23	2
	T/Emotionally Disturbed	BA					3		7						5
		MA					3		1						4
		Uk				105	94	16	15			43		164	109
		Total				105	100	16	18			43	3/	164	118
	1/Galculation incomplete due to missing data 2/ Calculation cannot be made due to missing data	ilssing da e to missi	ita Ing de	ıta		. •									

Employment data are unavailable
 Uk - Unknown

State Name: Florida

Data Period 1968-69

State Manie: Figura	nd towards	Í	T HOTEL			mo an bour		1				20/1 20101	,000		
acite a month						ы	Education	Level				,		· · ·	
T=Teacher A=Aide	Degree		Pres	Preschool	Elementary	ntary	Secondary	idary	Ungraded	-	Unspecified	ied	Total		
oist	rever	Cet	Esta- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated Fr	Enployed	Esti- mated	Employed	Esti- reled Em	nployed	
A/Emotionally Disturbed	No Deg						/7	-				AD FET		1	
Th/Recreational-E.D.	MA				17	1								1	
A/Recreational Therapist-E.D.	BA				77	1						===-	/2	1	
T/Mentally Retarded	Uk				563 1/	795	355	485				1-22:	917 1/	1280	
Th/Speech	Uk										1117	276	1117	276	٠.
T/Specific Learning Disabilities	Uk				77	59	/7	3 .			144 1/	3/	144 1/	62	
I/Physically Handicapped	Uk		4	7	47	52	13	18			302	ક્ર	366	72	
Th/Occupational	MA					1						2-7-		-	
	ğ											ហ	•- •-	5	
 1-4	Total				77	-					1 M	5	1-1/	9	
Th/Physical	ūķ,										1.7	13	1.7	13	
T/Socially Maladjusted	Uk						85	55				17.2°T.	85	55	_
O/Peripatologist	Uk										યા	3	(g)	اع.	•
O/Mobility Instructor	n k										15	3/	15	3/	
T/Music	άķ										λ <u>ξ</u> 5.	<u>ر</u> ا	.5 17,	3	
T/Physical Education	Ωk										.5 17	3/	₹ 5.	3	4.
												ar.	•••		
							<u></u>								I
		_													lor
															ida
		L													
1/Calculation incomplete due to missing data 2/ Calculation cannot be made due to missing 3/ Employment data are unavailable	missing due to mis able	lata	y data	·			·								
	•														

• ,		•	-	_	Γ			1		,							1	- 1	Geo	rgi I	a I			
				<u> </u>	ļ																			
am																						-	•	
Program		Breakdow																						
Education		No Program		_	×			×	×		X	×							×	×				
Educ		Itinerant												×										
	g	Residentia			×			×	×		X	×			•									
s)																							,	
je Ranges)	4	Secondary			13-16		_	13-16	13-16		13+	12-18		13-16		13-16							•	
Education Level (Age	Elementary	-amterne- diate			11-14		٠	11-14	11-14		9-13	71;-9		11-14		11-14							tate	
cation	Ele	Primary			7-10			7-10	7-IO		6-9	.9		7-10		7-10							to the s	
Edu		Preschool						3-6															not applicable to the state	
	•	Handicap Category $\frac{1}{2}$	Blind	Partially Sighted	Visually Handicapped	Deaf .	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Montally Retarded	EMR	IMR	MR (Custodial, Severe, Institutional)	Speech Impaired	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Multiple Handicapped			If no entry is shown, category is not app	
		olbneH eboO	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	ਜ-9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	Н-17	H-18			1/ II	

ation
Special Educ
Enrollments In
ia

	_					
		Enrollm	ents By Spe	ecial Educatio	Enrollments By Special Education Program Type	
Handicap Category	Education Level	Residen- tial	Itinerant	Unspeci- fied Program		Waiting List
Visually Handicapped	Preschool	87		6		943
	Elementary	99		218		3307
	Secondary	47		144		1913
Hearing Handicapped	Preschool	96		73		1232
	Elementary	300		161		10,775
	Secondary	140		35		5125
Emotionally Disturbed	Preschool	9		£9		2850
	Elementary	46		113		7804
	Secondary	31				5725
Mentally Retarded	Preschool	12				10
	Elementary	54				720
	Secondary	6				210
	Preschool	4		2843		5217
	Elementary	28		8470		19,267
	Secondary	38		1867		17,726
	Preschool	15		28		1100
	Elementary	204		380		3010
	Secondary	311		273		2198
Speech Impaired	Preschool		1021			6194
	Elementary		8932			10,602
	Secondary		825			4942
(cont.)						

Enrollments In Special Education State Name: Georgia

Data Period 1968-1969

ı —		<u> </u>		1	1				<u> </u>	 <u> </u>	-	1	· ·	G	eoi	gia	1	ι –	
	Waiting List	536	545	477	1130	1523	1123												
m Type																			
tion Progra																			
Enrollments By Special Education Program Type	Unspeci- fled Program	107	459	410	13	102	42												
ents By Spe	Itinerant															•			
Enrollme	Residen- tial						•												
	Education · Level	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary												
	Handicap Category	Homebound			Multiple Handicapped														
c	Handical Sode	1-HH		_	H-18	_			_				_		_				

								į				_	1						Ged	orgi	a]	
696	S												_			_		_					
1968-1	ım Type	:																			i		
Data Period 1968-1969	Special Education Program Types	Special Class		1/4-1/8	1/4-1/8		1/8	1/10	1/14	1/13	1/15	1/16-1/22	1/8-1/12	1/8-1/12		1/8							
Ď	ial Educat	Special Stinerant Class				1/4-1/12									08/1-55/1								
	Speci	Resource Room	1/6-1/12			1/8-1/6																	
act Ratio		Education Level	All Grades	Preschool	Elementary	All Grades	Elementary	Elementary	Secondary	Elementary	Elementary	Secondary	Elementary	Secondary	All Grades	All Grades							
Personnel/Pupil Contact Ratio		Occupation	Teacher	Teacher			Teacher			Teacher			Teacher		Teacher	Teacher							
State Name: Georgia		Handicap Category	Visually Handicapped	Hearing Handicapped			Emotionally Disturbed			EMR			TMR		Speech Impaired	1							
Ste	gb	Handic Sode	H-3	9-H			H-7			6-H			H-10		H-12	H-14							



hated Employed 57 190 Data Period 1968-1969 905 149 22 23 Total 406-591 Esti-mated Employed 190 905 159 149 32 22 27 22 **2**3 Unspecified 406-591 Esti-mated Employed mated Employed Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Secondary Education Level Esti-mated Employed Elementary Preschool Esti-mated Employed $\underline{1/}$ Calculation cannot be made due to missing data Uk-UnknownDegree Level Ωķ цķ ď 점점 늄 gk 늄 ă A-Aide O-Other T/Emotionally Disturbed T/Visually Handicapped T/Multiple Handicapped T/Hearing Handicapped State Name: Georgia T/ Mentally Retarded Occupation T/Speech Impaired T-Teacher . Th-Therapist T/Homebound T/EMR T/TMR

Georgia

State Name: Hawaii

Overview of Special Education Programs

Data Period 1968 - 1969

J

- Comment

Samuel .

.

-

.

	·					 .				 ,									I	Iaw	vaii	
	Itinerant		×										×					×			·	
Program	goom gesontce		×																			
1	Special Class	×	×		×	×		×		×	×				×		×					
Education	Special	X			×			×		×	×				*×		×					
	Residential									×	×											
e Ranges)	Unspecified												4-20					4-18				•
Education Level (Age	Secondary	13-20	13-20		13-20	13-20		13-20		13-20	13-20				13-20		13-20					
cation I	Elementary	7-12	7-12		7-12	7-12		7-12		7-12	7-12				7-12		7-12					
Edu	Preschool	4-6	4-6		3-6	·		4-6		4-6	4-6				3-6		4-6					
	Handicap Category $rac{1/}{}$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Handicapped	Mentally Retarded	EMK	TMR	MR (Custodial, Severe, Institutional)	Spaech Impaired.	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				*Private Schools
	Handicap Code	H-1	н-2	H-3	H-4	H-5	9-H	H-7	н-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17				

 $\underline{1}/$ If no entry is shown, category is not applicable to the state

Data Period 1968 - 1969

Enrollments In Special Education

State Name: Hawaii

d			Enrollm	ents By Spe	ecial Educe	Enrollments By Special Education Program Type	m Type	
Handica Code	Handicap Category	Education Level	Residen- tial	Special School	Day Special Class	Unknown Local Public	Itinerant	Walting List
H-1	Blind	Preschool	•	4				
		Elementary		6				
		Secondary			11			
H-2	Partially Sighted	Preschool			7			
		Elementary				30		
		Secondary				12		
H-4	Deaf	Preschool		44	83			
		Elementary	_	65				
		Secondary		34	7			
H-5	Hard of Hearing	Preschool			96			
		Elementary			118			rE
		Secondary			37			ЯA
H-7	Emotionally Handicapped	Preschool			6			II
	•	Elementary		22	77			ΑV
		Secondary		46	84			A
6-H	EMR	Preschool			19			T
		Elementary		29	1137			ис
		Secondary		79	996			
H-10	TMR	Preschool	23					wa:
		Elementary		42	124			
		Secondary		41	65			
						•		



. 6961	-	Waiting						ГE	a A	יוד	ΔΛ	4	T	O N		Vai			
Data Period 1968-1969	ım Type	Itinerant	3064							114									,
Data Pe	Enrollments By Special Education Program	Unknown Local Public										,							•
	ecial Educa	Day Special Ciass		22	66	2	3	18											
tion	ents By Sp	Special School		5 5	So	17	92	36											
ecial Educa	Enrollm	Residen- tial School								•									
Enrollments In Special Education		Education . Level	All Grades	Preschool	Secondary	Preschool	Elementary	Secondary		All Grades									
Name: Hawaii (Cont.)		Handicap Category	Speech Impaired	Specific Learning Disabilities		Orthopedically Handicapped				Homebound								•	
State	ď	Handica Code	H-12	H-14		H-16	<u> </u>			H-17									

Hawaii

Personnel/Pupil Contact Ratio

Data Period 1968-1969

Hawaii Itinerant 1/14 Special Education Program Types Resource 1/11 Room Special Class Day 1/10 1/13 1/16 1/12 1/12 1/13 1/13 1/14 1/8 1/8 1/8 1/6 4 Residen-Special 1/13 1/14 1/14 1/6 1/9 1/7 1/8 1/6 Education Elementary Elementary Elementary Elementary Elementary Elementary Elementary Preschool Secondary Secondary Secondary Secondary Secondary Secondary Secondary Level <u>Preschool</u> Preschool Preschool Preschool Preschool Preschool Training Assistant Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher Emotionally Handicapped Handicap Category Partially Sighted Hard of Hearing Blind Deaf EMR TMR Handicap Code H-10 H-7 H-2 H-4 3-F H-1 6-H

State Name: Hawaii

Resource Itinerant 1/75 1/30 Data Period 1968-1968 Special Education Program Types Room Day Special Class 1/12 1/11 1/9 Residen-Special 1/5.5 1/9 1/8 Education Elementary Elementary Elementary All Grades Level Secondary Secondary Secondary Preschool Preschool Personnel/Pupil Contact Ratio Occupation Therapist Teacher Teacher Aide State Name: Hawaii (Cont.) Handicap Category Speech Handicaps Handicapped Orthopedically Homebound TMR H-12 Handicap Code 91-H H-L H-10

Hawaii

16.5 Employe 236 22 23 Data Period 1968-69 Total Esti-mared 3,5 $\frac{233}{2}$ ह्य 34 20 63 15 41 20 Employed 16.5 3.5 236 46 22 Unspecified 2 Esti-mated 41 Employed \vec{a} Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Employment data unavailable Uk-Unknown Esti-mated Esti-mated Employed Secondary Education Level 12 73 1 Employed 41 Elementary Esti-mated . 103 6 103 10 8 12 Based upon employment data only (no waiting list data available). Esti-mated Employed Preschool Calculations cannot be made due to missing data. હ્યુ 8 Calculations incomplete due to missing data. Certified Degree Level Ωķ Uk Q, ď g ď Ωķ ğ 늄 ďķ d d Ωķ T/Specific Learning Disabilities O/Training Assistant in TML A=Aide O=Other T/Emotionally Handicapped State Name: Hawaii T/Mentally Retarded Occupation I/Partially Sighted T/Hard of Hearing 1/Orthopedical ly Th=Therapist T=Teacher Th/Speech T/Regular T/Deaf T/Blind A/TMR ઝ છા

Hawaii

Data Period 1968 - 1969

Overview of Special Education Programs

		Edu	Education Level (Age	evel (Ac	re Ranges)	-	Education	t	Program	
Handicap Code	Handicap Gategory $1/$	Preschool	Elementary	Secondary	Ungraded	Residential	Spec Ed Classes in Reg School	1		
H-1	Blind		5-12	12-18		×				
H-2	Partially Sighted		5-12	12-18		×				
H-3	Visually Handicapped									
H-4	Deaf	3-8	8-12	12-18		X				
H5	Hard of Hearing	3-8	8-12	12-18		×		×		
9-H	Hearing Handicapped									
Н-7	Emotionaily Disturbed*		8-18	14-19		×	(Legal	delinguents		-not
H-8	Mentally Retarded **	4 3-7	5-15	13-20		×				
6-H	EMR		•		6-21		X			
H-10	TMR				6-20		×			
H-11	MR (Custodial, Severe, Institutional)									
H-12	Speech Handicaps				6-21			×		
H-13	Speech and Hearing									
H-14	Special Learning Disabilities				6-20		×			
H-15	Brain Injured									
91-Н	Physically Handicapped				7-21		×			
H-17	Homebound									
									-	

^{*} Delinquents at State Youth Rehabilitation Center ** At Idaho State School and Hospital, mild and moderate

Idaho

If no entry is shown, category is not applicable to the state.

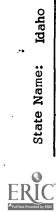


State Name: Idaho

Date Period 1968-1969

Enrollments In Special Education

			-		}			_		<u> </u>											Idal	10	Γ
	Waiting List						Э	/BI	Ή	VA	TO	N										,	
am Type					Emotionally Disturbed data)									•									
ion Progr					lly Distu																		
ial Educat	Itineranti			55	1 Emotions								2241	153									
Enrollments By Special Education Program Type	Spec Ed Classes In Reg Ichool				(Not valid				501	535	94	116			47	45	25	7					
Enrollme	Residen- tial	34	124		286	5	31	92		•													
	Education Level	Unaraded	Ungraded	Elementary	Ungraded	Preschool	Elementary	Secondary	Elemenary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	•				
	Handicap Category	Visually Handicapped	Hearing Handicapped		Emotionally Disturbed	12			EMR		TMR	•	Speech Handicaps		Special Learning Disabilities		Physically Handicapped				•		
H	andicap Code	H-3		_	H-7	H-8			6-H	\dashv	H-10		H-12		H-14	4	H-16						



Data Period 1968-1969 Special Education Program Types 1/70 1/70 Itinerant Spec Ed Spec Ed 1/12 1/12 1/10 1/12 1/10 1/12 Residen-tial 1/150 1/10 1/10 1/70 1/30 1/10 1/70 1/12 1/8 1/61/8 1/8 Elementary Education Level Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary <u>Preschool</u> Secondary Preschool Secondary Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Personnel/Pupil Contact Ratio Social Worker/Counselor Physical Education Occupation Teacher/Music Audiologist **Therapist** Teacher Teacher Teacher Teacher Teacher Teacher Teacher Physically Handicapped Emotionally Disturbed Visually Handicapped Hearing Handicapped Handicap Category Speech and Hearing Special Learning Disabilities State Name: Idaho EMR TMR H-16 Handicap Code H-13 H-14 H-10 H-3 9-H H-9 H-3 H-7

Idaho

1

Esti-mated Employed 116 וו 17 ד 13 111 25 Data Period 1968-69 Total 87 3/ 2 10 10 24 34 Esti-mated Employed Unspecified Employed 116 11 7 17 בו 6 13 Special Education Personnel Estimated Requirements/Employment Comparison 1/25 Ungraded Esti-mated 2 20 **2**4 Esti-mated Employed का का का Secondary Education Level Uk - Unknown 45 37 Esti-inated Employed Elementary 423/ 32 Z, 7 L/Based upon enrollment data only (no waiting list data available) Esti-mated Employed Preschool Galculations cannot be made due to missing data $\frac{2}{4}$ Calculations incomplete due to missing data $\frac{4}{4}$ Employment data unavallable by education level Certified Total X Total X Degree Level None None Total Total Total Total Total Total MA MA BA A BA BA B A=Aide O=Other O/Social Worker-Counselor T/Physically Handicapped 1/ Learning Disabilities T/Visually Handicapped T/Emotionally Disturbed T/Hearing Handicapped Th/Speech and Hearing T/Mentally Retarded State Name: Idaho Occupation Th=Therapist T/Vocational T=Teacher

Idaho



Preschool Elementary Secondary Ungraded Unspecified Total Esti-mated Employed Mated Employed Mat Data Period 1968-69 1.8 80. Ś φ. Ungraded Special Education Personnel Estimated Requirements/Employment Comparison 5 1.8 Education Level Elementary Certified Degree Level BA Total Total Total BA 4/Employment data unavailable A=Aide O=Other I/Physical Education Occupation State Name: Idaho .Uk - Unknown T=Teacher Th=Therapist O/Audiologist T/Music

ERIC Full fact Provided by ERIC

Data Period 1967-1968

Overview of Special Education Programs

State Name: Illinois

														 ,					<u> 111</u>	inc	is,	
E I	ltinerant												×				×					it is not tabulated in form
Program																						ated
	Day Special Class	X	Х		×	×		×		×	×				×		×		×	×		ot tabu
Education																					-	t is no
	Residential School			×			×							-			×					
(8)																						to child
Je Ranges	Ungraded												5-21									service to children.
Level (Age	Secondary	14-21	14-21		14-21	14-21		14-21		14-21	14-21				14-21		14-21		14-21	14-21		
Education I	Elementary	6-13	6-13		6-13	6-13	•	5-13		5-13	5-13				5-13		6-13		6-13	5-13		e much summary to the
Edu	Preschool	3-5	3-5		3-5	3-5											3–5		3-5	_		loes hav here in plicable
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Mentally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Multiple Handicapped	Socially Maladjusted		Illinois Department of Public Instruction does have much data on needed for this study, and so is provided here in summary form. $1/\sqrt{10}$ If no entry is shown, category is not applicable to the state.
	Sode		\vdash	_				-			H-10 IN	H-11 M	H-12 SF	H-13 Sy		H-15 Br	H-16 Ph	_	H-18 M	H-23 Sc		Illinc need
	Handicap	H-1	2-H	H-3	H-4	H-5	9-H	H-7	H-8	6-H	井	뷰	H	H-	H-14	H-	표	H-17	H-	H		



Enrollments In Special Education

Data Period 1967-1968

đ			Enrollmen	ts By Spec	Enrollments By Special Education Program Type	Program Type	 	
Handica Code	Handicap Category	Education Level	Resi- School		Day Special Class	treseniti	ltinerant	Waiting List
.H-1	Blind	Unspecified	-		120			
H-2	Partially Sighted	Unspecified			1064			
H-3	Visually Handicapped	Elementary	06					
-		Secondary	99					
		Ungraded	53					
H-4	Deaf	Preschool			281			
9-H	Hearing Handicapped	Unspecified			2117			BLE
		Preschool	2.1					[A .T]
		Elementary	257					AV.
		Secondary	155					, T
		Ungraded	48					N.
H-7	Emotionally Disturbed	Unspecified			280			
H-9	EMR	Unspecified			21941			-1
н-10	TMR	Unspecified			2678			
H-12	Speech Handicaps	Unspecified				84940	940	
H-14	Special Leaming Disabilities	Unspecified			2762			
H-16	Physically Handicapped	Unspecified			3971	35	3597	
		Elementary	73 -					
		Secondary	25			_		
H-18	H-18 Multiple Handicapped	Unspecified						Illir
H-23	Socially Maladjusted	Unspecified						

State Name: Illinois

																						<u>111</u>	inc	is
1968	Se	ineranti																		Aide)	Alde)			
Data Period 1967-1968	Program Types	Class Special	8	1/10	1/10	1/10	1/14	14	1/10	8	8	10	8	12	12	10	10	15	1/20	1/10 (1/15 with Aide)	1/10 (1/15 with	15	15	
Data	al Education Program		1/8	1/	1/	1/	1/	1/14	1/	1/8	1/8	1/10	1/8	1/12	1/12	1/10	1/10	1/15	1/	/1	1/	1/15	1/15	
	Special	Resi- School		1/8	1/12		1/8	1/12					1/7	1/7	1/7									
act Ratio		Education Level	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Preschool	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	
Personnel/Pupil Contact Ratio		Occupation	Teacher			Teacher			Teacher			T - Nursery-Kindergarten	Teacher			Teacher		Teacher		Teacher		Aide		
State Name: Illinois		Handicap Category	Blind			Partially Sighted			Deaf				Hearing Handicapped			Emotionally Disturbed		EMR		TMR				
Sta	ď	Handice aboD	H-1		_	H-2			H-4				9-H			H-7		6-H		H-10				

ERIC

St	State Name: Illinois	Personnel/Pupil Contact Ratio	ict Ratio		Da	Data Period	1967-1968	28
d				Speci	Special Education	on Program	ım Types	
Hand!cal	Handicap Category	Occupation	Education Level	Rest- dential School	Day Special Class	Коот Resource	Itineranti	All Programs
11 12	Greech Handicans	Therapist	Ungraded				1/80 yr	
7	ł	Teacher	Elementary		1/10			
* * *			Secondary		1/10			
н	Physically Handicapped	Teacher	Preschool	1/8	1/8			
1 1			Elementary	1/8	1/15			
			Secondary	1/8	1/15			
		Aide	Preschool		1/8			
	-		Elementary		1/15			
			Secondary		1/15			
		Therapist (Physical)	Ungraded		1/50 yr			
		Therapist (Occupational)	Ungraded		1/50 yr			
		Teacher Home & Hosp.	Ungraded				1/12 yr	
18,	g' Multiple Handicapped	Teacher	Preschool		1/8			
ř <u>– – – – – – – – – – – – – – – – – – – </u>			Elementary		1/10			
			Secondary		1/10			
		Aide	Preschool		1/8			
			Elementary		1/10			
			Secondary		1/10			
11-93	Socially Maladiusted	Teacher	Elementary		1/20	1/10	1/10	
<u>-</u>			Secondary		1/20	1/10	1/10	
		School Peychologist	All Grades					1/125 yr
	All Handicaps	Psychologist Intern.	All Grades					1/60 yr
_		School Social Worker	Ajl Grades	_			_	1/70 yr
					Ţ			

ERIC Full Text Provided by ERIC

I

TO THE THE THE PROPERTY OF A STATE OF THE THE PROPERTY OF THE

, <u>g</u>		Γ.	ě	[<u></u>]		4			4				77				17				_]		77		_
7 - 1968		al	Employe	36	106		28	27	167	42	1748	245		878	304	162	'	54	2	75	811	123			
Data Period 1967		Total	Esti- mated	<u>7</u> E	3/	7.7	28	28	238	28	1462	267	178	1001	276	277	265	79	79	299	7903∕	6	6	<u>-</u>	
Data P		ified	Employed	36	106				167	42	1748	245		,	304	162	/7				811	123	2/		
		Unspecified	Esti- mated	37	3/				176	28	1462	267	178		276	265	265				7903/	6	6		
on 1/		aded	Employed											878				54	5	75				available	
Comparis		Ungraded	Esti- mated											1061				79	79	299				t data una	
ployment	Level	dary	Employed			4/			4/							4/								4/ Employment data unavailable Uk - Unknown	
ments/Em	Education L	Secondary	Esti- mated			9			22							3								4 E	
d Require	Educ	ntary	Employed			/¥			47							4/									
Estimate		Elementary	Esti- mated			11			37							9								e) aal 515)	
Education Personnel Estimated Requirements/Employment Comparison		loot	Employed				28	27	4/															(ting list data available) s for all handicaps equal 515) sing data	
ducation		Preschool	Esti- mated				28	28	3															ting list data s for all han	
			Cer	×	×		×	×	×	×	×	×		×	×	X		×	×		×	×			
Special		Degree	Level	UK	UK		Uk	ďξ	Uk	UK	Uk	UK	UR	Ш	Uk	Uk	Uk	űk	UK		ďξ	ŪΚ	Uk	ly (no w total aic lue to m	
State Name: Illinois	cupation	T=Ieacher A = Aide		T/Blind	T/Partially Sighted	T/Visually Handicapped	T/Deaf	T/Nursery-Kindergarten/Deaf	T/Hearing Handicapped	T/Emotionally Disturbed	T/EMR	T/TMR	A/TMR	Th/Speech Handicans	T/Special Learning Disabilities	T/Physically Handicapped	A/Physically Handicapped	Th/Physical	Th/Occupational	T/Homebound and Hospital	T/Socially Maladjusted	T/Multiple Handicap	A/Multiple Handicaps	 Based upon enrollment data only (no wain 2/2 Employment data unavailable (total aide 3/2 Calculations cannot be made due to mis 	

Illinois



	Special		cation Pe	arsonnel	Estimate	Education Personnel Estimated Requirements/Employment Comparison Education Level	luirements/Em Education Le	Employment Level	Compart	ion 1/		Data P	Data Period1967	- 1968
22	Degree Level	iliineC	Preschool	hool	Esti- Esti- mated Empl	ntary	Secondary	payo	Ungraded	aded Employed	Unspecified	Employed	Total	al Employed
					1								_	
	UK.	×									$1123^{5/}$	348	112\$	348
	Uk	×									2340 3/	61	2340	
	Uk.	×									2006	362	2006	362
		-												
1														
							•							
		r					-							in
	Based upon enrollment data only (no waiting Calculations incomplete due to missing data	vaitin ng da	Based upon enrollment data only (no waiting list data available) Calculations incomplete due to missing data	a availat	ble)									

Data Period 1968-69

		· 		_			ı——	, -1			 -	 1	,		1		- 1		 1	 Īr	ndia	ina
			_																			
am																		_				
Program																						
Education		Special Dey			×	×	×		X		×	×	Data	×				×	×			
Educ		Special Schools							X		×	×	No									
	[6]	Residenti Special Classes			×	×									•							
(Sc	ıdary	High			16-21	16-21	16-21				16-21	16-21	16-21					16-21	16-21			· <u>.</u>
le Ranges)	Secondary]r. High			13-16	13-16	13-16				13-16	13-16	13-16					13-16	13-16			
evel (Aç	ntary	Inter- mediate			9-13	9-13	9-13				9-13	9-13	9-13					9-13	913			ate
Education Level (Age	Elementary	Primary			6-9	6-9	6-9				6-9	6-9	6-9					6-9	6-9			to the st
Educ	ī	oodssarq									9-9											not applicable to the state
		Handicap Category 1/	Blind	Partially Sighted	Visually Handicapped	Deaf .	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps $^{2}\!/$		Special Learning Disabilities 3/	Brain Injured	Physically Handicapped4/	Homebound			If no entry is shown, category is not app Includes most Hard of Hearing Experimental programs Includes special health programs
	dec	oibnaH eboO	H-1	H-2	H-3	H-4	H-5	9-H	L-7	8E	ਜ-9	H-10	н-11	H-12	H-13	H-14	H-15	H-15	Н-17			नोवालाका



Waiting List Data Period 1968-69 Enrollments By Special Education Program Type 198 119 1198 304 672 473 34,779 10,352 601 Day Special Class 90 72 Special Class 1127 Enrollments In Special Education Special Class dential 158 450 Resi-Education Level Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Special Learning Disabilities Handicap Category Physically Handicapped Visually Handicapped **Emotionally Disturbed** Speech Handicaps Hard of Hearing State Name: Indiana Deaf EMR TMR H-10 H-14 н-16 Handicap Code I-12 H--3 H-7 H.4 H-5 6-H

Indiana

ERIC Full text Provided by ERIC

St	State Name: Indiana	Personnel/Pupil Contact Ratio	act Ratio	O.	Data Period 1968 –69	
de		:		Special Educat	Special Education Program Types	
Handica Code	Handicap Category	Occupation	Education Level	All Programs		
6-H	EMR	Teacher	Preschool	1/10-1/12		
			Primary	1/10-1/13		
			Intermediate	1/12-1/15		
			Junior High	1/12-1/15		
			High School	1/15-1/17		
H-10	TMR	Teacher	All Grades	1/10-1/13		
H-12		Speech and Hearing Ther.	All Grades	1/5*		
		•				
			,			
	* Maximum case load 100 p	pupils				

ERIC Full Text Provided by ERIC

Employed 9 756 녉 9 10 383 Ħ Data Period 1968-69 Total Employed Esti-16 35 의 10 383 릐 Unspecified 250 Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded Preschool Elementary Secondary Ung Esti-mated Employed Esti-mated Employed Esti-mated Employed Esti-194 Education Level 175 137 1/ Calculations cannot be made due to missing data Degree Level Uk 肖 티 2 2 벍 봈 A-Aide O-Other T/Physically Handicapped T/Visually Handicapped T/Emotionally Disturbed T/Hearing Handicapped Th/Speech and Hearing State Name: Indiana Occupation Uk - Unknown . Th/Occupational T/Brain Injured T-Teacher Th-Therapist Th/Physical T/EMR T/TMR

Data Period 1968-1969

Overview of Special Education Programs

		Edu	Education I	Level (Age	le Ranges)	_	Education	1	Program	E	
Handicap	Handicap Category $1/$	Preschool	Elementary	Secondary	Ungraded	Residential	Special	Special Day	goom gezomce	Itinerant	
H-1	Binnd					_					
H-2	Partially Sighted										
H-3	Visually Handicapped		6-12	13-18	6-21	×	×	×	×	×	
H-4	Deaf										
H-5	Hard of Hearing										
H-6	Hearing Handicapped	3-5	6-12	13-18		×	×	×	×	×	1
1-H	Emotionally Disturbed		6-12	13-18	6-21	×	×	×	×	×	
H-8	Mentally Retarded										
6-H	EMR		6-12	13-18			×	×		×	
H-10	TMR		6-12	13-18			×	×		×	
H-11	MR (Custodial, Severe, Institutional)										
H-12	Speech Handicaps				6-21			×	×	×	
H-13	Speech and Hearing										
H-14	Special Learning Disabilities		6-12	13-18			×	×	×	×	
H-15	Brain Injured										
H-16	Physically Handicapped		6-12	13-18			×	×	×	×	
H-17	Homebound										
							-				
	Age Breakdowns are approximations $1/1$ f no entry is shown, category is not applicable to the state	pplicab	le to th	e state	· <u>.</u>		,			•	



State Name: Iowa

Data Period 1968-1969 220 homebound Enrollments By Special Education Program Type 17,663 ** * 206 Itinerant 30 59 106 Resource 12 43 Room Special Classes 84 166 4938 976 **5**3 3237 191 177 Day Enrollments In Special Education Special School 45 Unspecified Unspecified Unspecified Unspecified Unspecified **Unspecified** Unspecified Elementary Elementary Secondary Education Secondary · Level State Name: Iowa

Waiting

I**o**wa

8847 indirect service 7548 improvement programs

* * *

Special Learn. Disabilities Handicap Category Physically Handicapped Emotionally Disturbed Visually Handicapped Hearing Handicapped Speech Handicaps EMR TMR Handicap Code H-10 91-H H-12 H-14 9-H 6-H H-7

こうで 一大のとい おまかし さんきかんごう あんしゃない のないない のないない

Î

Data Period 1968-1969 Resource Special Education Program Types 1/25 * 1/15 1/15 1/10 Room 1/8 Special 1/20 1/10 1/10 1/10 1/15 1/8 Class Day 1/10 Residen-Special 1/10 1/20 1/10 1/15 School 1/10 tial All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Education Level Personnel/Pupil Contact Ratio Teacher-Hospital/Home Occupation Therapist Teacher Teacher Teacher Teacher Teacher Teacher Teacher H-14 Special Learn. Disabilities H-16 Physically Handicapped H-7 Emotionally Disturbed Handicap Category Visually Handicapped H-6 Hearing Handicapped H-12 Speech Handicaps State Name: Iowa * caseload EMR TMR

1/20*

1/15

1/8

1/20

Itinerant

1/50-1/75

1/15

Iowa

Handicap Code ERIC
Full Text Provided by ERIC

H-10

6-H

H-3

Data Period 1968 -1969

Special Education Personnel Estimated Requirements/Employment Comparison 1/ State Name: Iowa

_	_																				I	owa	ı			
	al la	Employed	۵	7	14	20	2	105	406	8	592	41	81	12	134	240	14	35	6	1	148	24	4	18		
	Total	Esti- mared	1 -	124 2/		17 2/	33				414 2/				112 2/	8-12	12 2/	77 92	3/	3	3/	3	3	3		
	ified	Employed		2.1	14	20	10	105	406	81	592	41	81	12	134	240	14	35	6	-	148	24	4	18	ng data	
	Unspecified	Esti- mated	5	124 2/	1 2/	17 2/	3/				5 2/				3/	8-12	12 21	72 92	3/	3/	3/	3/	3/	3/	to missi	
	Ungraded	Employed																							Calculations cannot be made due to missing data	argen
	Ungi	Esti- mated																							annot be	ונם חוומגלי
Level	idary	Employed									4/				4										ulations c	Uk – Unknown
Education L	Secondary	Esti									162				19										3/ Calc	
Educ	ntary	Employed									4/	_			4							_				
	Elementary	Esti- mated									247				. 93				!					i	(e)	
	hool	Employed																							ting list data available	
	Preschool	Esti- mated																							ting list dat	
,,	3137	Cei	×	×	×	×	×	×	×	×		×	×	Х		×	×	×	×	×	×	×	×	Х	raitir	,
	Degree	Tevel	Uk	Ωk	ūk	άķ	ďk	None	ВА	MA	Total	None	ВА	MA	Total	ďķ	ă	ďķ	ďk	ďķ	ď	ğ	ă	ğ	lly (no w	
tion	A-Aide	O-Other	licapped	icapped		dsturbed	ırded									icaps	, Disabilities	ndicapped				8	oordinators	Counselors	$\frac{1}{2}$ / Based upon enrollment data only (no wait 2). Calculations incomplete due to missing c	
Occupation	T-Teacher	Th-Therapist	T/Visually Handicapped	T/Hearing Handicapped	Th/Hearing	T/Emotionally Disturbed	T/Mentally Retarded	T/EMR		•		T/TMR				Th/Speech Handicaps	T/Special Learn. Disabilities	T/Physically Handicapped	Th/Physical	Th/Occupational	O/Psychologists	O/Social Workers	O/Work Study Coordinators	O/Voc. Rehab. Counselors	1/ Based upon e 2/ Calculations	1



		Γ-		×				×		· .		_	×	·	×		×		×	K	an	sas		
	Room		-									-	_							_				
am	Resontce		_	×				×							×		×		·					
Program																								
i	Special Class Class			×			×	×		×	×				×		×							
Education							·									_								
' 7	Residential			×			×	×				×		•	×		×							
			-	Ė						1											7			
Ranges)			-																					
	Ungraded											5-21												
Level (Age	Secondary			13-21			13-21	13-21		13-21	13-21		13-21		13-21		13-21		13-21					
Education L	Elementary			6-12			6-12	6-12		6-12	6-12		6-12		6-12		6-12	-	6-12			the state	×.	•
Educ	Preschool			no -5 min			no -5 min	no -5 min					_				no -5 min		no -5. min			ot applicable to the state.		
												tional)										applic	•	
												Instituti			es									
															Disabilities	i	pa					gory		
	ategor		_	Handicapped			pedd	Disturbed	þe			Severe,	SC	ing	Disa		icapp		iple			, cate		
	ap Çe		Sighted	ndica		aring	ndica	, Dis	etarde			٠,	dicar	Hear	rning	Ð	Hand		Mult			hown,		
	Handicap Category			ly He		of Hea	ng Ha	nally	Ily Re			ustod	h Har	h and	il Lee	[njure	ally	puno	Blind			is sl		
		Blind	Partially	Visually	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	TWR	MR (Custodial	Speech Handicaps	Speech and Hearing	Special Learning	Brain Injured	Physically Handicapped	Homebound	Deaf-Blind Multiple			If no entry is shown, category is		
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8		H-10	H-11	H-12	H-13	H-14	H~15	H-16	H-17	H-18			1/ If n	l	



Waiting List hot available in any amos soft getamites COMPLETE YN ANY All Programs Enrollments By Special Education Program Type Data Period Itinerant 116 15 126 134 16,220 94 Resource Special Class 12 155 3176 296 184 50 74 1314 82 34 Day Enrollments In Special Education Residen-tial 583 35 845 99 84 265 65 Unspecified Unspecified Unspecified Unspecified Education Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Preschool Ungraded Level Special Learning Disabilities Handicap Category Emotionally Disturbed Visually Handicapped Hearing Handicaps Speech Handicaps Mentally Retarded State Name: Kansas **EMR** TMR Handicap Code H-10 H-14 H-12 H-11 9-H H-3 H-9 H-7

Kansas

1

Sugar

ı

riod –	ogram Types	Resource Itinerant	1/6		14 1/10-35 per week	1/3		1/10 per week	1/10 per week		1/12 per week	1/12 per week			q				1/15 per week	1/15 per week	1/5-14 per week	4 1/5-14 per week	1/1	
Data Period	Special Education Program	Day Special Class			1/6-14 1/6-14		1/6	1/10	1/10	1/6	3 1/8 1/8	3 1/8 1/8	1/9-15	1/9-15	1/40 case load	1/5-8	1/5-8	*	3 1/13 1/13	1/13 1/13	4 1/5-14 1/5-14	1/5-14 1/5-14		
ot Ratio	dS	Education Residen- Level tial	Preschool	Elementary 1/5	Secondary 1/5	Preschool	Preschool	Elementary 1/7	Secondary 1/7	Preschool	Elementary 1/8	Secondary 1/8	Elementary	Secondary	Secondary	Elementary	Secondary	Ungraded 1/5*	Elementary 1/13	Secondary	Elementary 1/5-14	Secondary 1/5-14	Ungraded	
Personnel/Pupil Contact Ratio		Occupation	Teacher			Para-Professional	Teacher			Teacher			Teacher		Work Placement Consultant	Teacher		Teacher	Teacher		Teacher		Teacher	
State Name: Kansas		Handicap Category	Visually Handicapped				Hearing Handicaps			Emotionally Disturbed		- 1	EMR			TMR		Mentally Retarded	Special Learning	Disabilities	Physically Handicapped		Deaf-Blind Multiple	
Sta	de	Handica Code	H-3				9-H			1-H		_	6-H			10		H-11	H-14		H-16		H-18	

*estimated for purposes of study-not sure about ratio

Employed

જો

29

Total

8

22

25

14

65

셤

124

ના

335

2

64 271

298-498 Esti-mated 37-59 Data Period Employed Esti-Employed mated Employed 15 Unspecified 146 3/ 37-59 Special Education Personnel Estimated Requirements/Employment Comparison $1/\sqrt{1}$ Ungreded Esti-mated Esti-mated Employed 16 10 40 22 92 24 12 Secondary Education Level 87-146 16 Esti-mated Employed 2 179 219 7 7 Elementary 35 77 8 40 13 211-352 13 3 7 2 Employed Preschool Esti-mated Certified × Degree Level None Total Total Total Total Total Total Total A MA ¥ ğ BA a A 벍 BA O/Para-Professional-Vis. Hdcp. A≂Aide O≕Other O/Para-Professional EMR T/Visually Handicapped I/Emotionally Disturbed T/Hearing Handicapped State Name; Kansas Occupation Th=Therapist T=Teacher

Based upon enrollment only (no waiting list data available) Calculations cannot be made due to missing data Calculations incomplete due to missing data

Kansas

6 Ģ

~

Total

ğ

T/Mentally Retarded

A/TMR

Uk-Unknown

T/EMR

A/EMR T/TMR

Employed 102 52 154 ρŢ 23 41 Total 29-81 216-1081 Esti-mated Employed Esti-mated Employed Esti-32 Data Period 154 102 22 41 Unspecified 216-1081 29-81³/ 32 7 Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Employed Secondary Education Level O Esti-mated Employed mated Employed 16 σ Elementary ભો Based upon enrollment only (no waiting list data available)
 Calculations incomplete due to missing data
 Employment data unavailable
 Uk-Unknown Preschool Certified × × × × Degree Level Total Total N N AM Š Æ a ΩĶ T/Special Learning Disabilities I/Physically Handicapped T/Multiple Handicapped State Name: Kansas Occupation Th/Speech

Kansas

ERIC Full Text Provided by ERIC

Data Period1968 - 1969

	· · · · · · · · · · · · · · · · · · ·	1		ι		r—	_	· ·				,	_					_		Кe	ntu	cky	
										٠													
		\vdash	 -	H	-					-	-										-		
m			_	_	_	·				L									·		L		
Program	Itinerant													×				×		,		bedd	
	Special Class		×		×	×		×		×	×				×	-	×		_		-	dica	
Education	Day	_		-			_		_			_	<u> </u>							_	_	han hing	
Edu	Special Special									, ,	×											cally har teaching	tions
	Residential	×			×			×		×	×						×					Called "orthopedically handicapped Includes hospital teaching	*Age range for institutions
					-						-										-	orth	for ir
(se																				!		Called	nge
Ranges)	səberə IIA				6-21					-21	-21			-21			-21	6-21				Cal	λge ra
(Age		*		\vdash	_					-9	9			-9			9	-9			_	4]10]	! *
Level (Secondary	14-21	14-21		13-21	14-21		14-2]		14-21					14-21		14-21						
	Elementary	-13*	13		6-13	6-13		-13* -13		13					-13		-13					state	
Education		8	6-13		-9	-9		10- 6-1		6-1	_				-9		-9					the	
Ed	Preschool	5-7*			3-5*			2-9*														ole to	
												(1)										If no entry is shown, category is not applicable Includes severely Hard of Hearing	
									,			utional)			/							t app	
												titul			es 3							s no ng	
	1 1/											, Instit			Special Learning Disabilities		d 4/					ory i Ieari ired	
	Handicap Category			bed			ed	pec				Severe,		б	isak		ppe					of E	pd III
	Cate		5	capl		ρ)	capp	stur	ded				aps	arin	Ω gt		dica					lard	. TI
	des		Seeing	andi		arin	ndi	y Di	etär			lial,	ndic	He	arnii	ಧ	Han	2/				hown sly I	515
	ındic			HÀ		£ He	g He	riail	ly R			stoc	Ha	and	l Le	njure	ally	ounc				is sl	
	На	קנ	Partially	Visually Handicapped	af 2/	Hard of Hearing	Hearing Handicapped	Emotionaily Disturbed	Montally Retarded	25	2	MR (Custodial,	Spaech Handicaps	Speech and Hearing	cia	Brain Injured	Physicall y H andicapped	Homebound				ntry is se	nen
	•	Blind	Pel	Vis	Deaf	He	He	Em	Mic	EMR	TMR	MAR	ć.S	S	Sp	Bra	Ph	Ho				If no entry is shown, category is Includes severely Hard of Hearing	Called neurologicany impaned
	Handtcap Sode	H-1	2-H	H-3	H-4	H-5	9-H	Н-7	8-H	6-13	H-10	н-11	H-12	H-13	H-14	H-15	H-16	Н-17					3
		Π.	田	Ξ	H	工	H	H	11	174	田田	耳	끄	ഥ	H	耳	뙤	田			L	三名	એ

Data Period 1968 - 1969 for Diagnosis Waiting Enrollments By Special Education Program Type 166 Itinerant 9647 Day Special Class 19 30 5539 2606 674 91 23 14 314 4 31 Special School 170 Enrollments In Special Education (continued) Residen-Special Class 30 129 55 52 287 264 S 11 tial Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Education Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool . Level Speech and Hearing Handicaps Deaf and Severely Hard of Handicap Category Neurologically Impaired **Emotionally Disturbed** State Name: Kentucky Hard of Hearing Partially Seeing Hearing Blind EMR TMR H-10 H-13 H-14 Handicap Code H-2 H-4 H-5 H-7 6-H H-1

АТАФ

INCOMPLETE

Kentucky

(institutions)

Brollment Waiting List

Kentucky

												_							ken	cuc	·∧ y	
1969	Enrollment	Waiting	List				3	T3.	IAN	100	NI	AT.	Σħ									
Data Period1968 -		Di.	for Diagnosis																			
Data Pe	tion Progra		Itinerant			279																
	Enrollments By Special Education Program Type	Day	Special Class	81	83																	
tion	ents By Spe		Special School																			
cial Educa	Enrollm	Residen-	tial Special Class			35																
Enrollments In Special Education		Education	Level	Elementary	Secondary	Unspecified																
State Name: Kentucky Enr		Transfer of the Control of the Contr	national Category	Crippled and Special	Health, Problems								•			•		•				
State	đ	ica Sde	Hand	H-16								-							-			

Personnel/Pupil Contact Ratio

Data Period 1968-1969

Kentucky Special Education Program Types Itine, ant 1/100 1/12 Day Special Class 1/20 1/10 1/12 1/20 1/10 1/20 1/12 1/12 1/8 1/12 Special School Residen-Special 1/300 1/100 1/10 Class 1/10 1/25 1/6 1/6 1/8 1/4 1/5 1/8 1/6 1/5 1/7 Elementary All Grades Elementary All Grades All Grades All Grades Education All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Secondary Secondary Preschool Preschool Level Orthopedic Teacher Occupation Speech Therapist Teacher (EMR) Teacher (TMR) Psychologist Audiometrist Therapist Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Crippled and Special Health Problems Physically Handicapped* Neurologically Impaired Emotionally Disturbed Handicap Category Speech and Hearing Multiple Handicap Multiple Handicap Deaf and Severely Hard of Hearing Partially Sighted Hard of Hearing State Name: Blind EMR TMR Handicap Code H-10 H-13 H-16 H-18 H-14 H-2 H-4 H-5 1-H 6-H H-1

Kentucky

Employed 12 Data Period 1968-69 Total Esti-mated 7 21 ज 9 26 Employed Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison $1/\sqrt{1}$ Ungraded Esti-mated Esti-mated Employed Secondary Education Level 21 Uk-Unknown œ Esti-mated Employed Elementary 'n œ 28 10 7 47 œ Based upon enrollment data only (no waiting list data available). Calculations cannot be made due to missing data
Employment data unavailable Esti-mated Employed Preschool Degree Level None Total Total Total Total Total Total Total Total MA Æ ¥ AR B BA BA BA BA B Æ RA T/Physical Education for Blind T/Vocational Teacher for Deaf A=Aide O=Other T/Music Teacher for Blind State Name: Kentucky T/Art Teacher for Blind Occupation T/Partially Sighted O/Peripatologist T=Teacher Th=Therapist T/Blind T/Deaf न्य श्रम

. Kentucky

Employed 12 8 93 ဖ 351 490 Data Period 1968-69 Total 9 423 $\frac{2}{3}$ Calculation cannot be made due to missing data $\frac{3}{3}$ Calculation incomplete due to missing data Employed 15 52 Unspecified 7 Esti-mated Employed mated 2 એ 4 $\vec{\sim}$ Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Employed 'n 114 140 24 Secondary Education Level 130 m Esti-mated Employed mated Employed 230 298 54 14 Elementary 276 Based upon enrollment data only (no waiting list data available)
 Employment data unavailable
 Uk-Unknown Preschool Sertified Degree Level None None Total Total MA Total MA Total None Total ¥ MA MA A Ä ă UK BA BA BA O/Vocational Counselor for Deaf A=Aide O=Other State Name: Kentucky T/Emotionally Disturbed Occupation T/Hard of Hearing O/Audiometrist O/Psychologist TheTherapist T=Teacher A/Deaf T/EMR T/TMR

Kentucky

ERIC Full Text Provided by ERIC

Esti-mated Employed Data Period 1968-1969 7 83 65 11 **8** % 112 92 24 6 19 Total $31\overline{2}$ 39 127 86 Esti-mated Employed 18 86 Ξ 83 56 24 19 73 65 91 11 Unspecified 23.27 30 86 127 Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded Elementary Secondary
Estimated Employed mated Employed ~ 'n Education Level 1/ Based upon enrollment data only (no waiting list data available)
2/ Calculation cannot be made due to missing data
3/ Calculation incomplete due to missing data Preschool Esti-mated Employed Degree Level Total None Total BA MA Total None Total MA BA å MA MA BA 품 ğ A-Aide O-Other T/Neurologically Impaired T/Orthopedically Impaired State Name: Kentucky Th/Speech and Hearing A/Mentally Retarded Occupation Uk-Unknown T/TMR (cont.) T-Teacher Th-Therapist

Constitution of the second second second second second second second second second second second second second

Kentucky

	•											_							L	oui	sia	na	
														-									
am																			·				
Program									i														
Education P	Day	×	X		×	×		x		x	×		×		×		×		×	×			
Educ																							
	Residential Special	×			×									i			×						
es)																							
ye Ranges)		!																					
Level (Age	Secondary	12-21	12-21		12-21	12-21		12-21		14-21	16-21		12-21		12-21		12-21			12-21		ate.	
Education I	Elementary	6-11	6-11		6-11	6-11		6-11		7-15	7-15		6-11		6-11		6-11			6-11		o the sta	
Edu	Preschool	3-5	3-5		3-5	3-5		3-5		2-6	2-6		3-5		3-5		3-5			3-5		icable t	
	. Handicap Category $^{1\!$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	nearing Handicapped	Emotionally Disturbed	Montally Retarded	EMR	INR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Spaceh and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Cerebral Palsy	Slcw Learner		If no entry is shown, category is not applicable to the state.	
	Handicap Sode		F 2	н-3	H-4	H-5	9-H	1-H	8-H	6-년	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-28	H-29		я Л	



L**o**uisiana Waiting List AVAI LAB LE тфи Data Period 1968 - 1969 1,678 No Program Break-d≎wn 20,413 Enrollments By Special Education Program Type Day Special 708 121 137 137 332 6,553 1,524 121 260 561 Enrollments In Special Education Residenr Special 241 538 538 295 241 tial Education Elementary Secondary Ungraded . Level Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Special Learning Disabilities Handicap Category H-16 Physically Handicapped Emotionally Disturbed Visually Handicapped Speech and Hearing State Name: Louisiana Partially Sighted H-29 Slow Learner Blind Deaf EMR H-10 | TMR H-14 H-13 Handicap Code H-3 H-4 H-9 H-2H-7 H-1

-

1

_				,												,			Lc	uis	ian	a_		
69						.				į	į					<u> </u>								
-19(pes																						_	
Data Period 1968 - 1969	n Ty																							
iod	grar	·	\Box	\dashv	-	ᅥ	}	\dashv	1	-	\dashv				\perp	<u> </u>				-		\dashv	_	
Per	n Pro					}																		
Date	Education Program Types			-	\dashv	_	4	\dashv	\dashv		-	_	_			-	<u> </u>	-	<u> </u>				_	
	Educ			- 1		ļ	ŀ	.		ŀ												}		
	ial	70		_		_			_	_	_													
	Special	All Programs	01/1-8/1	/8-1/10	01/1-6/	01/1-8/	/8-1/10	21/1-01/	78-1/12	1/100	9-1/10	/12-1/18												
		All Progr	-8/1	-871	-6/1	-871	-8/1	977	87	7	1/8-	1/12												
0		Education Level	des	des	des	des	des	des	des	des	des	des												
Rati		ducatic Level	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	Ail Grades												
tact		<u>—</u>	A11	AII	AII	A11	AII	4	4	A11	<u>.</u> ∏	Ail	<u> </u>			<u> </u>								
Personnel/Pupil Contact Ratio																								
upil		ָ					,		İ														i	
el/P		Occupation																						
onns		dno								ايد														
Per	,	ŏ	her	her	her	cher	Teacher	cher	Teacher	Therapist	cher	her												
			Teacher	Teacher	Teacher	Teacher	Tea	Teacher	Tea	The	Teacher	Teacher												
			\vdash	\dashv				-	\dashv				-					_	 					
ĺ							9				bed													
ına		gor)			j		rrbe			so.	cap													
Louisiana		Handicap Gategory		nted		ing.	Jist			icap	andi													
		dap .		Sict		lear	11y I			Iand	lv H	1001												
me:		ındic		ally		of I	iona			ch F	ical	1	4											
State Name:		Η̈́	Blind	Partially Sighted	Deaf	Hard of Hearing	Emotionally Disturbed	EMR	TMR	Speech Handicaps	Physically Handicapped	Slow Learner	200											
Stat		ebo⊃	┝╌╢			H-5 I	_	6-H	H-1d 1		ı	000	1						 					
0	q.	Handica	H-1	H-2	, H-4	H	Н-7	Ħ	H	Ė	į	1 5	4_	_					 					

ERIC Full Text Provided by ERIC

Louisiana Esti-mated Employ-Data Period 1968 - 1969 9 99 22 22 85-127 436-819 67-84 59-88 \sqrt{z} 36-45 33-41 7 221 Esti- Employed Esti- Employed Esti-4/imployed 100 546 89 66 57 57 34 Unspecified 436-819 77 36-45 67-84 59-88 33-41 Dual personnel/pupil contact ratios. Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Secondary Education Level 17 Esti-mated Employed 4 ના Elementary 204 Based upon enrollment data only (no waiting list data available). Esti-mated Employed Preschool Calculation cannot be made due to missing data. Certified Degree Level Total Total Total Total Total Total Total Total Total Total Employment data unavailable. T/Special Learning Disabilities A=Aide O=Other T/Physically Handicapped State Name: Louisiana T/Visually Handicapped T/Emotionally Disturbed T/Hearing Handicapped Occupation I/Speech Handicaps T/Slow Learners Th=Therapist T=Teacher T/Speech T/TMR IEMR ने ये ले

Maine

NO SPECIAL EDUCATION DATA

WAS PROVIDED BY THE STATE

OF MAINE

Data Period 1968 - 1969

Overview of Special Education Programs State Name: Maryland.

	·	_	_	_		-			_			-		<u> </u>		·,	٠			Má	ry	and
!																						
_	Itinerant						×						×								-	
Program	Cooperative Special Class													· .			×		•	 	_	
ation	Day Special Class							X		x	×		×		×		×					
Education	Special						×							,								
	Residential Special Class						×	×		×	×										-	
s)	Ungraded							6-21														
e Ranges)	Secondary	13-21	13-21				13-21	13-21		13-21	13-21	·	13-21		13-21		13-21					•
Level (Age	-netal estate (4-4)	9-12	9-12				9-12	9-12		9-12	9-12		9-12		9-12		9-12					tate.
Education L	Primary (1–3)	6-9	6-9				6-9	6-9		6-9	6-9		6-9		6-9		6-9			-		to the si
Educ	Preschool (Experi- mental)	4-5	4-5				4-5	4-5		4-5	4-5		4-5		4-5		4-5					plicable
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Handicapped	Montally Retarded	EMR	IMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				If no entry is shown, category is not applicable to the state
<u></u>	Handicap Code	H-1	H-2	H-3	H-4	E-5	H-6	H-7	8-E	6-달	H-10	H-11	H-12	H-13	H-14	H-15	91-H	Н-17		-		7



Data Period 1968-1969 Personnel/Pupil Contact Ratio

				_											•			Ma	ryl	and	<u> </u>	_		
																							,	
am Types	Resource Itinerant Room																1/10	1/12	1/15				1/30	
tion Progr	Itinerant				1/7							1/20												
Special Education Program Types	Coopera- tive Special Class																1/10	1/12	1/15					
Spec	Day Special Class	1/7	1/10	1/12		1/7	1/10	1/12	1/7	1/12	1/15		1/7	1/3.5	1/10	1/5				1/10	1/15	1/20		
	Education Level	Primary	Intermediate	Secondary	Ungraded	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary	Ungraded	Unknown	Unknown	Unknown	Unknown	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary	Ungraded	
	Occupation	Teacher				Aide			Teacher				Teacher	Aide	Teacher	Aide	Teacher			Teacher				
	Handicap Category	Blind							Partially Sighted				Deaf		Hard of Hearing	,	Emotionally Handicapped			EMR				
de	Handica Sode	H1							H-2				H-4		H-5		1-H			6-H				

State Name: Maryland

Data Period 1968-1969 Itinerant Resource Room Special Education Program Types 1/80 Cooperative Special Special Class 1/10 1/10 1/10 1/10 1/15 1/15 1/15 1/10 1/10 1/15 1/15 1/7 Дау Personnel/Pupil Contact Ratio (cont.) Intermediate Intermediate Intermediate Intermediate Intermediate Intermediate Education Secondary Secondary Level Secondary Secondary Secondary Ungraded Primary Primary Primary Primary Primary Primary Occupation Therapist Teacher Teacher Teacher Aide Aide Aide H-16 Physically Handicapped Handicap Category State Name: Maryland Speech Handicaps Special Learning Disabilities TMR H-10 H-14 Handicap Code H-12

Maryland

Enrollments In Special Education

Data Feriod 1968 - 1969

Maryland Waiting List AVAILABLE LON Itinerant Enrollments By Special Education Program Type 25,000 143 107 70 329 tive Special Class Coopera-Day Special Class 1,964 505 181 6,107 8,296 693 629 51 58 247 1,499 209 45 5,087 39 Special Schools 316 177 83 Residen-Special Class 215 294 142 . 88 83 tial (Cont.) ntermediate Intermediate ntermediate Intermediate Intermediate Intermediate Intermediate Education Level Secondary Secondary Secondary Secondary Secondary Preschool Ungraded Primary Primary Primary Primary Primary Primary Primary H-14 Special Learning Disabilities Handicap Category Emotionally Handicapped Hearing Handicapped H-12 Speech Handicaps Partially Sighted EMR H-10 | TMR Handicap Code H-2 9-H H-76-H

State Name: Maryland

Maryland

														_	 		 	IVIa	ryı	and		
1969		•	Waiting List						Э.	īΒĀ	II.A	VA (LOI	1								
Data Deriod 1968 -	any T me	17 20	Itinerant																		_	
Data Do	Puro Ilmente Ry Suecial Education Program Tyne	Coppera	tive Special Class		82																	
:	ocial Educa	ממו דמתה	Day Special Class	1,036	314	71									,						.	
+400) uoi-	onte Ry Sne	cuts by ope	Special Schools																			
ciol Educa	Porollm	T. J. J. J.	residen- tial Special Class			•											•					
Forcellments In Special Education (Cont.)			Education Level	es(cont,Secondary	Primary	Intermediate																
Oracl Manual Man			Handicap Category	Special Learning Disabilities (cont)			•	•								•						
0,000	đ	c9	tbraeH boO	H-14	H-16																	



Maryland Employe <u>س</u> Data Period 1968-69 Total E21 165 524 3384 3124 নি 338 71 गि آم ا 317 Esti-mated Employed Unspecified Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated 312 Esti-mated Employed ના Secondary Education Level Uk - Unknown 4144 70 55 55 Employed છાં હ્યા ન ला Elementary 283 4 1018 283 4 524 Eti-mated 247 165 6 52 1/Based upon employment data only (no waiting list data available)
2/Galculations cannot be made due to missing data
3/Employment data unavailable
4/Galculations incomplete due to missing data Esti-mated Employed Preschool Certified Degree Level Я 눔 눔 Ωķ 挌 ğ 뉡 뉡 ğ ğ 肖 肖 험 ğ 섫 g T/Special Learning Disabilities A/Special Learning Disabilities I/Orthopedically Handicapped A/Orthopedically Handicapped A=Aide O=Other I/Emotionally Disturbed State Neme: Maryland Occupation I/Partially Sighted T/Hard of Hearing A/Hard of Hearing Th=Therapist T≈Teacher Th/Speech &/Deaf T/Blind A/Blind A/TMR I/Deaf T/EMR T/TMR



Data Period 1968.. 1969

State Name: Massachusetts Overview of Special Education Programs

		Edu	Education Level (Age Ranges)	evel (Ag	te Range		1			Education	1	Program	_	
rcsp	1/	- B-G-	Elementary	ıtary	Secondary	ary	Un-	leit				ə	;	-uəu
bnsH boO	Handicap Category	school	Ŧ.	Inter.	јг. н.	Sr, H.	graded	Kesiden Class	Schools	Special Class	Coop.	goom gesontc	Itineran	Supple r tary Inst.
Н-1	Blind	pvt 3-6	-9	6-12	13.	3-21		×		X		×	×	×
H-2	Partially Sighted		-9 	6-12	13	13-21				×	><	×	×	×
H-3	Visually Handicapped		1 7	۔ ا										
H-4	Deaf	$3-4\frac{1}{2}$	pub $4\frac{5}{2}$ -7 pub e pvt $4\frac{1}{2}$ -15	7	į. 1			pvt	×	×				
H-5	Hard of Hearing		•	•										
9-H	Hearing Handicapped		•	•										
Н-7	Emotionally Disturbed			8-11	12-14	15-21		pvt	pvt	×	×	-	×	
H-8	Mentally Retarded													
H-9	EMR	3-7	8-9	9-11	12-14	15-21	,			NO	DATA			
H-10	TMR	3-7	8-9	9-11	12-14	15-21		,		×				
H-11	MR(Custodial)			·			3-21	×						
H-12	Speech Handicaps 2/						6 -21	•					×	
H-13	Speech and Hearing							•						
H-14	Special Learning Disabilities													
H-15	Brain Injured						_							
H-16	Physically Handicapped		-9	-12 13-	-21		6-21			×			×	
H-17	Homebound				_						_			
H-18	Blind Retarded & Emotionally Disturbed						1-8		pvt	NO DA	DATA			IVI
H-19	Aphasic Children	pvt 3-7	-9	6-12 13-	-21			pvt		pvt				ss
H-27	Learning Impairment $\frac{3}{}$						6-21.		pvt	×		×	×	
	If no entry is shown, category is not applicable to	licable to	o state											lus
77	Includes Hard of Hearing	•		;	;	•								<u> </u>
	Expansion of Special Learning Disabilities	s, includ	es, includes perceptually handicapped	eptually	handica	pedd								<u>s</u>

ERIC

Full Text Provided by ERIC

Massachusetts

State	State Name: Massachusetts Enr	Enrollments In Spe	In Special Education	tion				Data Pe	Data Period1968 -	-1969	
dı			Enrollm	ents By Sp	scial Educa	Enrollments By Special Education Program Type	туре				
epidaeH eboD	Handicap Category	Education · Level	Residen- tial Class	Special Schools	Day Special Class	Coopera- tive Class	Resource	Itinerant	Suppli- mentary Institution	Waiting List	
H-1	Blind	Preschool	7				1			9	
	ä	Elementary	47		20		6	4	2		
		Secondary	88		07		2	8	10		
H-2	Partially Sighted	Elementary			62	25	12	73	12	300	·
		Secondary			13	15	3	65	12		,
H-4	Deaf	Preschool		102	161						, ,
		Elementary	150	315	82	•					
H-7	Emotionally Disturbed	Unspecified	700	609	450	200		250		1000	
H-10		Inspecified			1526						
H-12	}	Unspecified						3200			
91-н	! }	Unspecified			450			3000		100	
H-18		Ungraded		7							,
H-19		Preschool			7						
		Elementary			59						
		Unspecified	23			_,-					
H-27	Learning Impairments	Unspecified		70	200		150	1500			,
										1	
											IVI
											ass
											acı
											nus
											ett
			•				. 1				S

Massachusetts

St	State Name: Massachusetts	Personnel/Pupil Contact Ratio	tact Ratio		Ωŝ	Data Feriod	1968-1969			
₫₽				Special	al Educati	Education Program Types	am Types			
qte		Occupation	Education	Residen-		Day	Coopera			-elddnS
Han Co	Handicap Category		Level	tial Class	Special Schools	Special Class	tive Class	Resource Room	Resource Itinerant Room	mentary Instit.
E	Blind	Teacher	Preschool	1/5						
			Elementary	1/10				1/9	1/5	
			Secondary	1/12				1/12	1/10	
			Ungraded	1/7						
H-2	Partially Sighted	Teacher	Elementary			1/8	1/12	1/14	1/12	1/1
			Secondary			1/12	1/14	1/16	1/15	1/1
H-4	Deaf	Teacher	Preschool		1/8	1/8				
			Elementary	1/10	1/10	1/8				
		Aide	Preschool			1/8				
H-5	Hard of Hearing	Teacher	Ungraded						1/25	
		Therapist	Ungraded						1/90	
	•		Elementary			1/10				
Ξ	Emotionally Disturbed	Teacher	Elementary			1/8	1/30			
1		Aide	Elementery			1/8				
H-1	Speech Handicaps	Therapist	All Grades						1/90	
H-16		Teacher	Elementary			1/10				
			Secondary			1,/10				
		Teacher/Home Bound	Elementa::y						1/5	
			Secondary .						1/5	
		Aide	All Grades			1/10				
H-19	Aphasic	Teacher	All Grades		1/8					
H-27	Learning Impairments	Teacher	All Grades					1/8		
			•				··•			

(constant)

Journal of Street, Str

Table Services

damen.

, -	State Name: Massachusetts	ssachusetts	Specia	al Ed	ucation	Personnel	Estimate	ccial Education Personnel Estimated Requirements/Employment Comparison	nents/Em	ployment	Compari	son 1/		Data Pe	Data Period 1968-1969	8-1969
	Occupation	ion		pə				Educ	Education Le	Level						
	T=Teacher	A=Aide	Degree	J11.	Preschool	hool	Eleme	Elementary	Secondary	dary	Ungr	Ungraded	Unspecified	cified	Total	al
	Th=Therapist	O=Other	Level	Cer	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employe
	T/Blind		None	×				4		1						5
			ВА	×				6		2						11
			MA	×				5		1.5						. 9
			Total		3	/5	/ 7 6	18	18 2/	4.5	3/	/%			7708	22.
	I/Partially Sighted	, ed	None	×						1	: 1					1
			ВА	×				4		2						9
			MA	×				2.5		1						3.
			Total				44.2/	6.5	/78	4.					1525	10.
	T,'Deaf 1/		None	×								13				13
			BA	×								64				64
- 1			MA	×								104				104
۰.		ī	Ω̈́	×							, •	3			d	3
			Total		33	/ 5	09	4			<u>/</u> E	184			93.4	184
_	Th/Speech		BA,	×										200		200
			MA	×										125		125
_			Total				11	4/			3/	4	36	325	47 5/	325
	A/Deaf		Total		20	15									20	/=
	T/Emotionally Disturbed	isturbed	ВА	×				52								52
			MA	×				52								52
			Total				3/	104	3/	4/					3/	104
	A/Emotionally Disturbed	isturbed	None				<i>\f</i>	15	15	4/					75	15
	2/Based upon eng/2/Calculation in	Assed upon errollment data only (no waiting list Calculation incomplete due to missing data Calculation cannot.be made due to missing data	ly (no wa missing ue to miss	iting data sing	y list dat data	waiting list data available) ng data issing data	(e)									
	*/Employment da	Employment data unavailable		1												
	1															

THE COLUMN

ERIC Full Text Provided by ERIC

1-10

Employed 593 150 250 400 333 Data Períod 1968 - 1969 93 164 Total 195 645 Estir. mated Employed 35 150 250 400 14 12 Unspecified 1927 645 Employed \vdash Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Esti-mated Employed 126 16 225 Secondary Education Level ल Employed 338 96 193 55 Elementary Esti-mated 1 Based upon enrollment data only (no waiting list data available) Calculation incomplete due to missing data Calculation cannot be made due to missing data Employment data unavailable Esti-mated Employed Preschool Certified Degree Level Total None None . D Total Total Total MA BA BA A=Aide O=Other A/Physically Handicapped 1/ State Name: Massachusetts T/Physically Handicapped T/Learning Impairments Occupation T=Teacher Th=Therapist T/Aphasic 1

Massachusetts

1-107

			· ·		,	•				· •	·	r·	 1					·		M	ich	iga	n	
- 1969		Waiting List						3	BL	7717	AVA	TO	N											
Data Period 1968 -	By Special Education Program Type																							
ition		Itinerant										46	1901	2377				1281	72877	11068				
cial Educa	Enrollments	Full Time	22	388	212	477	893	472	31	1920	543	99	14354	13161	106	2593	1513				340	3641	1383	
Enrollments In Special Education		Education . Level	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschcol	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	
State Name: Michigan		Handicap Category	Visually Handicapped	۱ ۵		Hearing Handicapped			Emotionally Disturbed			EMR			TMR			Speech Handicaps		•	Brain Injured			
State	dı	solbneH eboO	H-3			9-H			H-7			H-9			H-10			H-12			H-15			

Michigan Data Period 1968-1969 Special Education Program Types Programs 1/10 1/10 1/15 1/80 1/15 Education All Grades All Grades All Grades All Grades All Grades All Grades All Grades Level Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher H-16 Physically Handicapped Emotionally Disturbed Handicap Category Visually Handicapped Hearing Handicapped State Name: Michigan H-12 Speech Handicaps H-9 | EMR H-10 TMR H-7 Handicap Code | 9-H

1

Section 2

Employed 218 258 968 1893 221 82 Data Period 1968 -69 Total 231 249 351 1065 103 2127 Employed 218 258 896 1893 314 221 Unspecified 77 /7 12 Esti-mated Esti-mated Employed mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Secondary Education Level 3 59 1035 126 138 54 Esti-mated Employed Elementary 910 39 112 192 1083 216 $\frac{1}{2} \text{Based upon enrollment data only (no waiting list data available)} \\ \frac{2}{2} \text{Calculations cannot be made due to missing data} \\ \frac{3}{2} \text{Employment data not available}$ Esti-mated Employed Preschool 16 Certified × × × Degree Level š 늄 ď 뉡 벍 ន័ 늄 A=Aid); O=Other T/Physically Handicapped State Name: Michigan T/Emotionally Disturbed I/Visually Handicapped I/Hearing Handicapped T/Speech Handicaps Occupation Uk-Unknown Th=Therapist T=Teachar T/EMR T/TMB

Michigan

ERIC Full Text Provided by ERIC

Data Period 1968 - 1969

Overview of Special Education Programs

,						_								- ,	r 1				- 1	N	lini	nesota
				-																		
n Program																						
Education	Special sloods						·			,		×										•
	Residential			×			×						,	•								
es)										İ											,	
e Ranges	Secondary			13-21			13-21			13-21	13-21	13-20	13-21		13-21			-	13-21			
Education Level (Age	Linter- mediate			10-12			10-13			10-12	10-12	-12	10-12		10-12				10-12			state.
ation I	Primary			5-9			5–9			6-9	6-9	9	5-9		5-9				5-9			to the
Educ	Preschool			0-4			0-4			0-5	0-5	0-5	0-4		0-4				0-4			is not applicable to the state
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf .	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Montally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities *	Brain Injured	Physically Handicapped	Homebound	Multiple Handicapped (Crippled)			If no entry is shown, category Includes Emotionally Disturbed
 -	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-म	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-18			*]

				- 1		1	1	- T	<u> </u>	1	- 1	J		- 7		,	Mi	nne	sot	ਟੇ: 	<u> </u>	 I	 1	
1969		Waiting	List					-			Ħ	JB.	ПA	VA	TO	N								1
Data Period 1968-1969	ım Type	No	Program Break down	225	591	9,832	1,196				21,557	6,902	493											
Data Pe	tion Progre																							
	sial Educal																							
ion	Enrollments By Special Education Program Type	Special	Schools					217	371	209														
cial Educat	Enro.lme		Resident tial	97	44				-															
Enrollments in Special Education		Education	level .	Unspecified	Unspecified	Unspecified	Unspecified	Preschool	Elementary	Secondary	Unspecified	Unspecified	Unspecified											
State Name: Minnesota		Handican Gategory		Visually Handicapped	Hearing Handicapped			MR (Custodial, Severe,			Speech Handicaps)isabilities												
State No	đ	dic:	Han	H-3 Vis	н-6 Не	H-9 EMR	H-10 TWR	H-11 MR	·		H-12 Spe	H-14 Spe	H-18 Mu						_			 		

Supple-mental 1/601/4 Data Period 1968 - 1969 Special Education Program Types 1/60 1/15 коош ge<mark>aom</mark>ce Special Special 1/15 1/15 1/60 1/10 1/10 1/9 evij Coopera Day Special Ciass 1/15 1/15 1/10 1/10 2 1/15 1/15 1/10 1/10 Schools 17 Special Education All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Level Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teach.er Teacher Teacher Teacher Teacher H-14 Spectal Learning Disability Handicap Category H-18 Multiple Handicapped H-3 Visually Handicapped State Name: Minnesota H-6 Hearing Handicapped H-12 Speech Handicaps All Handicaps H-9 EMR H-1dTMR Handieap Code

Minnesota

ERIC Full Text Provided by ERIC

Esti-mated Employed Data Period 1968 -1969 210 203 480 1063 196 851 100 Total Esti-mated Employed 109 480 1063 196 210 203 851 Unspecified Employed Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Esti-mated Employed mated Employed Secondary Education Level Elementary Esti-mated Employed Preschool Calculations cannot be made due to missing data. Degree Level š ᇊ Ř 벍 Ħ T/Special Learning Disabilities A=Aide O=Other State Name: Minnesota T/Multiple Handicapped T/Visually Handicapped T/Hearing Handicapped T/Speech Handicapps T/Mentally Retarded Occupation Th=Therapist T=Teacher TÆMR T/TMR

			_	_									 -				Mi	ssi	ssi	ppi					-,
	Self con- tained Hear- ing Program																								
E	Itinerant																								
Program	Cooperative Special Class *																								
l i	Cless Decial					ζ,	, ^\	6 2																	
Education	Schools Special							bi	b1 6	١.														.,	
	Resi d ential Special Class								V		0	•						,			-				
()												_													
Ranges)									,																
	··															-									
Level (Age										1										_			tate		
Education	Secondary									14-2													o the s		
Edu	Ejementary						6-14			6-14											70		cable to		
												itutional)						-		years	21 years		is not applicable to the state		
	<u></u>											Institu			ities					0 to 21	t t	Ī			
	egory -			ped			ped						*.	J.G	Special Learning Disabilities		apped			1	ge: 6 (on + EN	categ		
 	ap Cat		Sighted	Handicapped		ıring	ndicap		tarded			ial, Se	dicaps	Heari	rning l	þ	Handic			egislat	he ran	ilitatio	hown,		
	Handicap Category		lly Si			Hard of Hearing	Hearing Handicapped	Emotionally	Mentally Retarded			MR (Custodial, Severe,	Speech Handicaps	Speech and Hearing	al Lea	Brain Injured	Physically Handicapped	Homebound		permissive legislation:	in practice the range:	Rehab	ry is s		
	11.	Blind	Partially	Visually	Deaf	Hard	Heari	Emoti	Ment	EMR	TMR	MR (C	Speed	Speed	Speci	Brain	Physi	Home		permis	in pra	* Vocational Rehabilitation + EMR	If no entry is shown, category		
	Handicap	H-1	2-H	H-3	H-4	9-H	9-H	<i>2</i> -Н	8-H	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17				* Voc	17 If		

Waiting List Date Period 1969-70 Enrollments By Special Education Program Type WAS THE THE PARTY OF THE PARTY * Available only by class per handicap or total of all special education pupils ALAC. Enrollments In Special Education oj. Education Level Handicap Category State Name: Mississippi Handicap Code

Mississippi

ERIC Fronted by ERIC

Data Period 1969-70 Special Education Program Types Coopera-Self contive tained Special Hearing Class Program 1/20 1/20 1/8 1/20 Education All Grades All Grades All Grades All Grades All Grades Level Personnel/Pupil Contact Ratio Aide/Speech Pathologist Aide/Speech Therapist Speech Pathologists Occupation Speech Therapist Teacher Handicap Category State Name: Mississippi HH2 Speech Handicaps H-9 EMR geolbasH Gode

Mississippi

Esti-mated Employed 265 59 17 52 Data Period 1969-70 Total Unspecified Esti-mated Employed 265 2 29 9 52 17 Ungraded Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison Secondary Secondary Seti-nated Employed Education Level Esti-mated Employed Elementary Employed Preschool Esti-mated Emplo $^{1}/_{\mathrm{Calculations}}$ cannot be made due to missing data Certified × Degree Level Total MA цķ 首首 BA A=Aide O=Other State Name: Mississippi Occupation T=Teacher Th=Therapist Th/Speec.. T/TMR T/EMR

Mississippi

-

Data Period 1968 - 1969

Overview of Special Education Programs

· · ·										_]			7				Mis	souri
			_						-								-				
i												×				×	1				ver
Day			×			×	×			X				X		×					erve o
Special School										×						-					hich s nature
Residential School			×			X.	×			×											(9) Regional Diagnostic Clinics which serve over led because of the high turnover nature of the
												,	•								tic Cli igh tur
									Ţ												lagnos Ethe h
Unspecified				-			3-18		6-20	6-20		6-18				-18				_	nal Di
															_	9					Regional
Secondary			13-18			13-18	13-18														
Elementary			6-12			6-12	6-12		6-12					6-12		6-12					the state. rates nine not includ
Preschool				•		3~5	0-5		4~5	4-5											not applicable to the state. Il Health also operates nine (9) year. These were not included
											nal)										t applic ealth a r. The
ory 1/			pa			d	, pe	,			Instit			sabilities		ped					ategory is not a t of Mental Hea iren each year.
licap Categ		Sighted	Handicappe		!earing	Handicappe	lly Disturb	Retarded			'	andicaps	nd Hearing	earning Dis	ıred	y Handicap	pu				 If no entry is shown, category is Missouri, the Department of Menta 1500 mentally retarded children each
, Hand	Blind	Partially	Visually	Deaf	Hard of F	Hearing 1	Emotiona.	Mentally	EMK	TWR	MR (Cust	Speech H	Speech a	Special L	Brain Inju	Physicall	Homebour				f no entry i ssouri, the mentally re
Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	8-H	6-स	H-10	н-11	H-12	H-13	H-14	H-15	ਜ-16	H-17				1/ L In Mis 1500
		<u> </u>	<u> </u>	ئــــــــا	<u> </u>	نــنــا	_ • • .		1 -	12				لتنا				· ⁾		L	L
	Code Handicap Category Freschool Becondary Category Category Category Category Category Category Secondary Secondary Secondary Secondary Secondary Secondary Secondary	Handicap Category Day Special School School Breschool School School School School School School School School	Handicap Category 1/ Code Handicap Category 1/ Special School Blind Preschool Special School Special School Day Special School Special School Day Special School Day Special School	Handicap Category 1/ oi	Handicap Category 1/ nooi nooi nooi nooi nooi nooi nooi noo	Handicap Category 1/ oi	Handicap Category 1/ oi fight	Handicap Category 1/ of fift o	Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Looi Handicap Category Catego	Handicap Category 1	degendence Handicap Category I/I ood find find find find find find find fin	Handicap Category 1	Handicap Category 1/6 of Fr. 19	Handicap Category 1/ Fig. 60 of F	Handicap Category Landicap Cat	Handicap Category 1/60 of Fr	Handicap Category 1/2 of the first of the fi	Handicap Category Mandicap Category Mand	Handicap Category 1/	Headicap Category 1	Handtcap Category 1

State Name: Missouri

Miss	ouri
------	------

Handicap Category Education Residential Recial Education Program Type Lavel	State	State Name: Missouri Er	Enrollments In Special Education	cial Educat	ion		Data Period1968	od 1968 –	1969
Handicap Category Education Level Residential rial (Class) Special (Class) Itherant (•		Enrollme	nts By Spe	ecial Educa	tion Program	Type	
Visually Handicapped Elementary so ondary 118 100 PR Hearing Handicapped Elementary scondary 208 447 PR PR Enotitonally Disturbed Freschool 60 447 PR PR Enementary 208 447 PR PR PR PR EMR Freschool 150 417 PR PR <td>ebo O</td> <td>Handicap Category</td> <td>Education Level</td> <td>Residen- tial</td> <td>Special</td> <td>Day Special Class</td> <td>Itinerant</td> <td></td> <td>Waiting List</td>	ebo O	Handicap Category	Education Level	Residen- tial	Special	Day Special Class	Itinerant		Waiting List
Hearing Handicapped Secondary Secondary 80 28 447 A47 A47 <t< td=""><td>-3</td><td>Visually Handicapped</td><td>Elementary</td><td>118</td><td></td><td>100</td><td></td><td></td><td></td></t<>	-3	Visually Handicapped	Elementary	118		100			
Hearing Handicapped Elementary Secondary Secondary 135 447 109 47	Ī		Secondary	80		28			
Enotionally Disturbed Preschool 60 109 EMR Elementary 450 417 12264 EMR Preschool 150 267 12264 Elementary 420 267 12264 12264 Flementary 700 5726 12264 12264 Freschool 150 12264 12264 12264 Preschool 150 12264 12264 12264 Breschool 150 12264<	9-	Hearing Handicapped	Elementary	208		447			
Enotionally Disturbed Preschool 60 417 Composition Elementary 450 417 Composition 267 Composition Elementary 150 12264 Composition Comp			Secondary	135		109			
EMR Elementary Elementary 450 417 Preschool 450 417 Preschool 450 417 Preschool 420 267 Preschool 420 267 Preschool 420 4	H-7	Errotionally Disturbed	Preschool	09					
EMR Secondary 420 267 Condary Accondary			Elementary	. 450		417			
EMR Preschool 150 Preschool 15264 Preschool 12264 Preschool Preschool 100graded 700 72264 Preschool Preschool 150 Preschool Preschool Preschool 150 Preschool Preschool <td></td> <td></td> <td>Secondary</td> <td>420</td> <td></td> <td>267</td> <td></td> <td></td> <td></td>			Secondary	420		267			
TMR Elementary 12264 12264 Pecondary 12264 Pecondary Pecondary Perschool 150 Pecondary Perschool 150 Pecondary	6-H	EMR	Preschool	150					
TMR Elementary 5726 TMR Elementary 261 261 Secondary 117 2682 2682 Special Learning Disabilities Elementary 260 1762 26862 Special Learning Disabilities Elementary 260 1703 140 1003 homebound Physically Handicapped Elementary Secondary 140 1003 homebound Ungraded Ungraded 140 1003 homebound			Elementary			12264			
TMR Ungraded 700 Beschool 150 261 <			Secondary			5726			
TMR Preschool 150 261 Perschool Secondary Secondary 117 261 261 Speech Handicaps Ungraded 500 1762 26862 Special Leaming Disabilities Elementary 238 26862 Physically Handicapped Elementary 560 140 Secondary Ungraded 140 1003 homebound Ungraded Ungraded 1003 homebound			Ungraded	200		•			
Speech Handicaps Ungraded 500 1762 26862 Special Learning Disabilities Elementary 238 26862 Physically Handicapped Elementary 238 ' Secondary Secondary 140 1003 homebound Ungraded Ungraded 1003 homebound	-10		Preschool	150					
Speech Handicaps Ungraded 500 1762 26862 Special Learning Disabilities Elementary 238 2660 Physically Handicapped Elementary 560 1003 homebound Ungraded Ungraded 1003 homebound			Elementary			261			
Speech Handicaps Ungraded 500 1762 26862 Special Learning Disabilities Elementary 238 ' Physically Handicapped Elementary 560 Secondary 140 1003 homebound Ungraded Ungraded 1003 homebound			Secondary			117			
Speech Handicaps Ungraded 238 Special Learning Disabilities Elementary 238 Physically Handicapped Elementary 560 Secondary 140 Ungraded Indicapped			Ungraded	500	1762				20 schools
Special Learning Disabilities Elementary 238 Physically Handicapped Elementary 560 Secondary 140 Ungraded	-12		Ungraded				26862		
Physically Handicapped Elementary 560 Secondary 140 Ungraded	-14	Special Learning Disabilities	Elementary			238		,	
140	-16	Physica	Elementary			260			
			Secondary			140			
			Ungraded				1003 home	punoq	
			,						

J

I

J 1.

Hardicap Category	ERIC	Sta	State Name: Missouri	Personnel/Pupil Contact Ratio	act Ratio		А	ata Perioc	Data Period 1968–1969	œ.
Handicap Category Level List Level List Level List Level List Level List Level List Level List Level List Level List Level List Level List Level List Lis		вb		wo it cannot		Specia	I Educa	tion Progr	am Types	
H-3 Visually Handicapped Teacher Elementary 1/12		Handic Sode		Occupation	Education Level	Residen-S	pecial	Day Special	Itinerant	
H-6 Hearing Handicapped Teacher Elementary 1/12 1/12 1/15		H-3	Visually Handicapped	Teacher	Elementary	1/12		1/6-1/12		
H-6 Hearing Handicapped Teacher Elementary 1/8 1/8					Secondary	1/12		1/6-1/12		
H-6 Hearing Handicapped Teacher Elementary 1/8 Secondary 1/8 Ungraded 1/8 Ungraded 1/8 Ungraded 1/8 Ungraded 1/8 Ungraded 1/8 Ungraded 1/8 Ungraded 1/12 Elementary 1/12 Secondary 1/12 Elementary 1/50 Elem					Ungraded	1/12				
H-7 Emotionally Disturbed Teacher Counselor 1/8 H-7 Emotionally Disturbed Teacher Preschool 1/12 Elementary 1/12 Secondary 1/50 Elementary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Ingraded 1/100 Ungraded 1/100		9-H	Hearing Handicapped	Teacher	Elementary	1/8		1/6-1/14		
H-7 Emotionally Disturbed Teacher Discussed 1/8 H-7 Emotionally Disturbed Teacher Elementary 1/12 Counselor Elementary 1/50 Elementary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Counselor Preschool 1/25 Ingraded 1/100 Ungraded 1/100 Counselor Preschool 1/25 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100					Secondary	1/8		1/6-1/14		ĺ
H-7 Emotionally Disturbed Teacher Reschool 1/12 Elementary 1/12 Secondary 1/12 Secondary 1/50 Elementary 1/50 Secondary 1/50 Counselor Reschool 1/25 Indiageded 1/100 Counselor Reschool 1/100 Ungraded 1/100 Counselor Reschool 1/100 Ungraded 1/100 Counselor Reschool 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100	•				Ungraded	1/8				
H-9 EMR Counselor Elementary 1/12 Secondary 1/12 Secondary 1/12 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/25 I/10 Secondary 1/25 I/10 Counselor Teacher Dreschool 1/100 Ungraded 1/25 1/10 Counselor Dreschool 1/100 Secondary I/100 Counselor Dreschool 1/100 Dresc		H-7	Emotionally Disturbed	Teacher	Preschool	1/12				
H-10 TMR Teacher Counselor Freschool 1/20 H-20 EMR Teacher Freschool 1/25 H-10 TMR Teacher Freschool 1/25 H-10 TMR Teacher Freschool 1/25 H-10 TMR Teacher Freschool 1/25 Counselor Freschool 1/25 Ungraded 1/25 1/10 Counselor Freschool 1/25 1/10 Ungraded 1/25 1/10 Counselor Freschool 1/100 Ungraded 1/25 1/10 Ungraded 1/25 1/10			,		Elementary	1/12		1/6-1/10		
H-9 EMR Teacher Preschool 1/50 H-9 EMR Teacher Teacher Flementary 1/50 Elementary 1/50 Secondary 1/50 Elementary 1/50 Counselor Ungraded 1/25 1/10 Ungraded 1/25 1/10 Counselor Preschool 1/10 Ungraded 1/25 1/10 Ungraded 1/10 Ungraded 1/10 Ungraded 1/10 Ungraded 1/100 Ungraded 1/100	1				Secondary	1/12		1/6-1/10		
H-9 EMR Teacher 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary 1/50 Secondary Secondary Secondary 1/25 I/100 Secondary Secondary Secondary Secondary Secondary I/100 Secondary I/100 Secondary Secondary I/100 Secon	- 1			Counselor	Preschool	1/50				
H-9 EMR Teacher Preschool 1/50 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 1/25 1/100 <th< td=""><td>2 2</td><td></td><td></td><td></td><td>Elementary</td><td>1/50</td><td></td><td></td><td></td><td></td></th<>	2 2				Elementary	1/50				
EMR Teacher Preschool 1/25 I Secondary Secondary I I Counselor Preschool 1/100 I/100 TMR Teacher Preschool 1/25 I/10 TMR Counselor Preschool 1/25 I/10 Counselor Preschool I/100 I/100					Secondary	1/50				
H-10 TMR Teacher Counselor Counselor Ungraded 1/25 1/100 Ungraded 1/25 1/100 Ungraded 1/25 1/100 Ungraded 1/25 1/100 Ungraded 1/25 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded 1/100 Ungraded Ungrad		6-H		Teacher	Preschool	1/25				
Secondary Ingraded I/25 Ingraded I/25 Ingraded I/100 Ingraded I/100 Ingraded I/25 Ingraded I/25 Ingraded I/25 Ingraded I/25 Ingraded I/25 Ingraded I/25 Ingraded I/25 Ingraded I/100 I/100 Ingraded I/100 Ingraded I/100 Ingraded I/100					Elementary			1/15-1/20		
Counselor Preschool 1/100 I/100 TMR Teacher Preschool 1/100 I/100 Counselor Ungraded 1/25 1/10 Counselor Preschool 1/100 1/100					Secondary			1/15-1/20		
Counselor Preschool 1/100 TMR Teacher Preschool 1/25 Counselor Preschool 1/100 Ungraded 1/100 1/100					Ungraded	1/25	-			Mi
TMR Teacher Preschool 1/100 TMR Teacher Ungraded 1/25 1/10 Counselor Preschool 1/100 1/100				Counselor	Preschool	1/100				sso
TMR Teacher Preschool 1/25 1/10 Counselor Preschool 1/100 1/100					Ungraded	1/100				uri
Ungraded 1/25 1/10 Preschool 1/100 Ungraded 1/100		H-10		Teacher	Preschool	1/25				
Preschool Ungraded			-		Ungraded	1/25	1/10	1/10-1/15		
				Counselor	Preschool	1/100				
					Ungraded	1/100				

case load Data Period 1968-1969 /80-1/12\$ Special Education Program Types Itinerant 1/1 1/1 Day Special /10-1/12 /6-1/10 /10-1/12 Residen-Special 1/10 1/10 Personnel/Pupil Contact Ratio (cont.) Education Level Elementary Elementary Elementary Secondary Secondary Ungraded Ungraded Ungraded Homebound Teacher Occupation Therapist Teacher Teacher Teacher Aide Special Learn. Disability Physically Handicapped Handicap Category Speech Handicaps State Name: Missouri TMR (cont.) H-10 91-H Handicap Code H-12 H-14

Missouri

Missouri Employed 48 65 20 22 113 152 1157 26 1192 14 95 37 40 11 Ξ Deta Period 1968-1969 Total 83-1364 933-1232 27-37^{4/} 140-186 Esti-mated 8 Employed 14 14 75 1157 1157 65 65 75 Unspecified ્ર 3/ Esti-mated লা ल Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ 9 œ တ 8 4 œ 29 13 21 Ungraded 28 Esti-mated Employed ᆌ 10 9 13 1 Ξ 34 17 Secondary Education Level 286-381 61 - 199-11 24 - 35ω Esti-mated Employed 10 15 9 16 36 6 'n 13 Elementary 59-101 79-107 613-817 18-26 1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculations cannot be made due to missing data
4 Employment data unavailable Esti-mated Employed 7 S Preschool 'n Rea Reg Reg Reg Reg Certified Red Degree Level None None Total Total Total Total Total MA MA MA MA M ď ä BA Æ BA O/Counselor for Emotionally A=Aide O=Other T/Emotionally Disturbed T\Nisually Handicapped T/Hearing Handicapped State Name: Missouri Occupation Disturbed (cont.) Th=Therapist T=Teacher T/EMR

Uk - Unknown Reg - At least regular education certificate - uncertain of special education certification

Employer Data Period 1968-1969 Total 214-335 Esti-mated 23-39 202 176 176 Employed 56 Unspecified Esti-mated Employed 119 8 57 22 284 Special Education Personnel Estimated Requirements/Employment Comparison 1/÷ ~ 3. 41 7 Ungraded 214-335 Esti-mated $196^{2/2}$ 176 176 Employed mated Employed Secondary Education Level 24 Elementary Esti-mated 23-39 Preschool Esti-mated Employed Certified Degree Level None. None Total Total Total Total A MA ğ ğ a I/Special Learning Disabilities A=Aide O=Other State Name: Missouri O/Counselor for EMR Occupation O/Couselor for TMR I/Charge, IMR Th=Therapist T=Teacher Th /Speech T/TMR A/TMR

151

20

31

2,2

72 284 24

Based upon enrollment data only (no waiting list available) Calculations incomplete due to missing data

Missouri

1166

090-1073

1166

1003

11-14

46-56

Total

T/Physically Handicapped

2

Employment data unavailable

Esti-mated Employed Data Period 1968 -1969 Total Elementary Secondary Ungraueu Esti-Esti-mated Employed mated Employed mated Employed Special Education Personnel Estimated Requirements/Employment Comparison $1/\sqrt{1}$ Education Level Preschool Ssti-mated Employed Reg Rea Certified Reg Degree Level MA MA MA MA R. MA Ä Ā BA W Other personnel for which contact ratios are not known --A=Aide O=Other State Name: Missouri Occupation O/Psychologist (PT) Th/Occupational O/Social Worker Th=Therapist O/Audiologist_ O/Counselor T=Teacher Th/Physical I/Concepts h/Speech I/Mobility Th/Speech

220

Based upon enrollment data only (no waiting list data available)

Calculations cannot be made due to missing data

Uk - Unknown

Handloap Category Partially Signed Handloap Category Partially Signed Handloap Category Partially Signed Handloap Category Partially Signed Partial	Particle Montana Overview of Special Education Programs Educatio	RIC			U					Constant		The second of th			
Handleap Category Mandleap Category Mand	Paducation Education Edu		Stal	Montana	ecial Ed	lucation	Programs			Data	Periodl	ı	1970		
Handicap Category 1	Handicap Category Manager Handicap Category Manager Handicap Category Manager Handicap Category Manager Handicap Category Manager Handicap Category Manager Handicap Handi				Edu		(Age	Ranges)		Educ	1.	rogran			
H-1 Sind 3-6 7-14 14-19 X X H-2 Partially Sighted 7-13 X X X X H-3 Visually Handicapped 3-6 6-14 14-19 X X X H-5 Hearling Endicapped 6-8 10-13 X X X X H-6 Hearling Endicapped 5-12 X X X X X H-7 Encitonally Disturbed 5-12 X </td <td>H-1 Blind H-2 Partially Sighted H-3 Visually Handicapped H-4 Daaf H-5 Herd of Hearing H-5 Herd of Hearing H-6 Herd of Hearing H-7 Emotionally Disturbed H-7 Emotionally Disturbed H-1 Expect Handicaps H-1 Speech Handicaps H-1 Speech Handicaps H-1 Speech and Hearing H-1 Speech Handicapped H-2 Speech Handicapped H-3 Speech Handicapped H-3 Speech Handicapped H-4 Speech Handicapped H-5 Handicapped H-6 Speech Handicapped H-7 Handicapped H-7 Handicapped H-8 Speech Handicapped H-9 Speech Handicapped H-1 Speech Handicapped H-1 Speech Handicapped H-1 Speech Handicapped H-2 Speech Handicapped H-3 Speech Handicapped H-4 Speech Handicapped H-5 Handicapped H-7 Handicapped H-8 Handicapped H-9 Handicapped H-1 Handi</td> <td>- </td> <td>Handicap Code</td> <td></td> <td>Preschool</td> <td>Elementary</td> <td>Secondary</td> <td></td> <td>Special</td> <td>Class in Class in</td> <td>Cooperative</td> <td>) .</td> <td></td> <td>·</td> <td></td>	H-1 Blind H-2 Partially Sighted H-3 Visually Handicapped H-4 Daaf H-5 Herd of Hearing H-5 Herd of Hearing H-6 Herd of Hearing H-7 Emotionally Disturbed H-7 Emotionally Disturbed H-1 Expect Handicaps H-1 Speech Handicaps H-1 Speech Handicaps H-1 Speech and Hearing H-1 Speech Handicapped H-2 Speech Handicapped H-3 Speech Handicapped H-3 Speech Handicapped H-4 Speech Handicapped H-5 Handicapped H-6 Speech Handicapped H-7 Handicapped H-7 Handicapped H-8 Speech Handicapped H-9 Speech Handicapped H-1 Speech Handicapped H-1 Speech Handicapped H-1 Speech Handicapped H-2 Speech Handicapped H-3 Speech Handicapped H-4 Speech Handicapped H-5 Handicapped H-7 Handicapped H-8 Handicapped H-9 Handicapped H-1 Handi	- 	Handicap Code		Preschool	Elementary	Secondary		Special	Class in Class in	Cooperative) .		·	
H-2 Partially Sighted 7-13 M X	H-2 Pertially Sighted 7-13 N H-3 Visually Handicapped 3-6 6-14 14-19 X X H-5 Herd of Hearing 6-8 10-13 X X X H-5 Herd of Hearing Eandicapped 5-12 X X X X X H-6 Hearing Eandicapped 5-12 X X X X X H-7 Emotionally Disturbed 5-12 X X X X X H-8 Montally Retarded 6-16 16-19 X X X H-9 EwiR MacCustodial, Severe, Institutional) 6-16 14-18 X X H-13 Speech Handicaps 6-14 14-18 X X X H-13 Speech and Hearing 5-20 -14 14-18 X X X H-13 Speech and Hearing 15-14 X X X X X H-14 Speech Handicapped 7-14 X X X X <th< td=""><td></td><td>H-1</td><td>Biind</td><td>3-6</td><td>7-14</td><td>14-19</td><td></td><td>×</td><td></td><td></td><td>×</td><td></td><td></td><td></td></th<>		H-1	Biind	3-6	7-14	14-19		×			×			
H-3 Visually Handicapped 3-6 6-14 14-19 X X X H-5 Hearl of Hearing 6-8 10-13 X	H-3 Visually Handicapped 3-6 6-14 14-19 X X H-5 Hearl of Hearing 6-8 10-13 X X H-5 Hearl of Hearing 6-8 10-13 X X H-6 Hearling Eandicapped 5-12 X X X H-7 Emotionally Disturbed 5-12 X X X H-8 Montally Retarded 6-16 16-19 X X H-10 EMR Montally Retarded 5-7 6-20 X X H-11 MR(Custodial, Severe, Institutional) 6-14 14-18 X X H-12 Speech Handicaps 6-14 14-18 X X H-13 Speech end Hearing 7-14 X X X H-13 Speech Handicapsed 7-14 X X X H-15 Brain Injured 7-14 X X X H-17 Homebound 7-14 X	_	H-2			7-13					×	_			
H-3 Deaf H-19 X	H-3 Daaf H-6 Hard of Hearing H-6 Hearing Eandicapped H-7 Emotionally Disturbed H-8 Montally Retarded H-10 TMR H-10 TMR H-11 MR (Custodial, Severe, Institutional) H-12 Spacch Handicapped H-13 Spacch and Hearing H-14 Special Learning Disabilities H-15 Brain Injured H-16 Physically Handicapped H-17 Homebound H-18 Induced H-19 Handicapped H-19 Handicapped H-19 Handicapped H-10 Handicapped H-10 Handicapped H-11 Homebound H-12 Handicapped H-13 Handicapped H-14 Special Islaming Disabilities H-15 Handicapped H-16 Handicapped H-17 Homebound H-18 Handicapped H-19 Handic		H-3	Visually Handicapped					·						
H-5 Hearing Eandicapped 6-8 10-13 X X X H-6 Hearing Eandicapped 5-12 X <t< td=""><td>H-5 Hard of Hearing 6-8 10-13 X X H-6 Hearing Handicapped 5-12 X X H-7 Emotionally Disturbed 5-12 X X H-8 Montally Retarded 6-16 16-19 X X H-10 TMR 5-7 6-20 X X H-11 Spaceh Handicaps 6-14 14-18 X X H-12 Spaceh and Hearing 6-14 14-18 X X H-13 Spaceh and Hearing Disabilities 7-14 X X H-15 Brain Injuned 7-14 X X H-16 Physically Handicapped 7-14 X X H-17 Homebound 7-14 X X H-17 Homebound 7-14 X X H-17 Homebound 7-14 X X</td><td></td><td>H#</td><td>Deaf</td><td>3-6</td><td>6-14</td><td>7</td><td></td><td>×</td><td></td><td></td><td>×</td><td></td><td></td><td></td></t<>	H-5 Hard of Hearing 6-8 10-13 X X H-6 Hearing Handicapped 5-12 X X H-7 Emotionally Disturbed 5-12 X X H-8 Montally Retarded 6-16 16-19 X X H-10 TMR 5-7 6-20 X X H-11 Spaceh Handicaps 6-14 14-18 X X H-12 Spaceh and Hearing 6-14 14-18 X X H-13 Spaceh and Hearing Disabilities 7-14 X X H-15 Brain Injuned 7-14 X X H-16 Physically Handicapped 7-14 X X H-17 Homebound 7-14 X X H-17 Homebound 7-14 X X H-17 Homebound 7-14 X X		H#	Deaf	3-6	6-14	7		×			×			
H-5 Hearing Eandicapped 5-12 X <td>H-5 Hearing Eandicapped H-7 Emotionally Disturbed H-8 Montally Retarded H-9 EMR H-10 TMR H-11 Spaceh Handicaps H-12 Spaceh Handicaps H-13 Spaceh and Hearing H-14 Special Learning Disabilities H-15 Brain Injured H-16 Physically Handicapped H-17 Homebound H-18 Homebound H-19 Physically Handicapped H-19 Physically Handicapped H-10 Physically Handicapped H-10 Physically Handicapped H-11 Homebound H-12 Homebound H-13 Spaceh and Hearing H-14 Special Learning Disabilities H-15 Homebound H-16 Homebound H-17 Homebound H-18 Homebound H-19 Homebound</td> <td></td> <td>H-5</td> <td>Hard of Hearing</td> <td>8-9</td> <td>귀</td> <td></td> <td></td> <td></td> <td>×</td> <td>×</td> <td></td> <td></td> <td></td> <td></td>	H-5 Hearing Eandicapped H-7 Emotionally Disturbed H-8 Montally Retarded H-9 EMR H-10 TMR H-11 Spaceh Handicaps H-12 Spaceh Handicaps H-13 Spaceh and Hearing H-14 Special Learning Disabilities H-15 Brain Injured H-16 Physically Handicapped H-17 Homebound H-18 Homebound H-19 Physically Handicapped H-19 Physically Handicapped H-10 Physically Handicapped H-10 Physically Handicapped H-11 Homebound H-12 Homebound H-13 Spaceh and Hearing H-14 Special Learning Disabilities H-15 Homebound H-16 Homebound H-17 Homebound H-18 Homebound H-19 Homebound		H-5	Hard of Hearing	8-9	귀				×	×				
H3 Emotionally Disturbed 5-12 Accordance X	H-7 Emotionally Disturbed. 5-12		H-6			•	•			,					
H-S Montally Retarded 6-16 16-19 X Common Name H-10 TMR 5-7 6-20 X X X H-11 MR (Custodial, Severe, Institutional) 6-14 14-18 X X X H-12 Spaceth Handicaps 6-14 14-18 X X X X H-13 Spaceth and Hearing 15-14 14-18 X	H-S Montally Retarded 6-16 16-19 X H-10 TMR 5-7 6-20 X H-11 MR(Custodial, Severe, Institutional) 6-14 14-18 X H-12 Spaech Handicaps 6-14 14-18 X C H-13 Spaech and Hearing C		H-?	Emotionally Disturbed		-1			-	×					
H-10 TMR H-11 MR(Custodial, Severe, Institutional) 5-7 6-20 X <th< td=""><td>\$\frac{1}{2}-\triangle \triangle \t</td><td></td><td>8-H</td><td>Montally Retarded</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>,</td><td></td><td></td></th<>	\$\frac{1}{2}-\triangle \triangle \t		8-H	Montally Retarded									,		
H-10 TMR H-11 Speech Handicaps 6-14 14-18 X X H-13 Speech Handicaps 6-14 14-18 X X H-13 Speech and Hearing X X X X H-14 Special Learning Disabilities X X X X H-15 Brain Injured 7-14 X X X X H-16 Physically Handicapped 7-14 X X X X H-17 Homebound 7-14 X X X X H-17 Homebound X X X X X H-17 Homebound X X X X X	 H-10 TMR H-11 MR(Custodial, Severe, Institutional) H-12 Speech Handicaps H-13 Speech and Hearing H-14 Special Learning Disabilities H-15 Brain Injured H-16 Physically Handicapped H-17 Homebound H-17 Homebound H-17 Homebound H-17 Homebound H-18 Homebound H-19 Homebound H-10 Homebound H-11 Homebound H-11 Homebound H-12 Homebound H-13 Homebound H-14 Homebound H-15 Homebound H-16 Homebound H-17 Homebound H-18 Homebound H-19 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound <l< td=""><td> 1 - 1</td><td>6-년</td><td>EMR</td><td></td><td>91-9</td><td>7</td><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td></l<>	 1 - 1	6-년	EMR		91-9	7			×					
H-11 MR (Custodial, Severe, Institutional) 6-14 14-18 X X H-13 Speech and Hearing 6-14 14-18 X X H-14 Speech and Hearing Disabilities Company of the company of th	 H-11 MR(Custodial, Severe, Institutional) H-12 Speech Handicaps H-13 Speech and Hearing H-14 Special Learning Disabilities H-15 Brain Injured H-16 Physically Handicapped H-17 Homebound H-18 Homebound H-19 Homebound H-10 Homebound H-11 Homebound H-12 Homebound H-13 Homebound H-14 Homebound H-15 Homebound H-16 Homebound H-17 Homebound H-18 Homebound H-19 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound H-10 Homebound	27	H-10		2-7	6-20				X					
Spaech Handicaps 6-14 14-18 X X Spaech and Hearing Special Learning Disabilities - <td< td=""><td>Speech Handicaps 6-14 14-18 Speech and Hearing 6-14 14-18 Special Learning Disabilities 7-14 Brain Injured 7-14 Physically Handicapped 7-14 Homebound X Homebound A no entry is shown, category is not applicable to the state.</td><td>,</td><td>H-11</td><td>MR (Custodial, Severe,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Speech Handicaps 6-14 14-18 Speech and Hearing 6-14 14-18 Special Learning Disabilities 7-14 Brain Injured 7-14 Physically Handicapped 7-14 Homebound X Homebound A no entry is shown, category is not applicable to the state.	,	H-11	MR (Custodial, Severe,											
Specch and Hearing **	Specch and Hearing Special Learning Disabilities Brain Injured Physically Handicapped Homebound no entry is shown, category is not applicable to the state.		H-12	1		6-14	71					×			
Special Learning Disabilities 7-14 X X Year Physically Handicapped 7-14 X Year	Special Learning Disabilities Brain Injured Physically Handicapped Homebound no entry is shown, category is not applicable to the state.		H-13						_						
Brain Injured Physically Handicapped 7-14 X , Homebound	Brain Injured Physically Handicapped Homebound no entry is shown, category is not applicable to the state.		H-14							,					
Physically Handicapped 7-14 X , Homebound	Homebound Homebound no entry is shown, category is not applicable to the state.		H-15												
Homebound	H-17 Homebound Language H-18 Homebound Language H-19 Homebound Langu		표-16			7-14				×					
Monta	1 1 1		H-17												
Monta	1 1														
nta	1													Мо	
														nta 	
						•									

																			· - ,	. I	/Ion	tan	a	
1970		Waiting List								Ε	₹BF	TI 4	VA	TO	N									
Data Period 1969-1970	ım Type																							
Data Pe	tion Progre	Itinerant	. !				15										803			;				
	cial Educa	Coopera- tive	Special Class			25					7													
ion	Enrollments By Special Education Program Type	Special Class in	Regular Schools							7	7	20	1023	165	12	787		47						
cial Educat	Enrollme	Residen- tial	Special Class		29	•		92	.18															•
Enrollments In Special Education		Education .		Preschool	Elementary	Elementary	Preschool	Elementary	Secondary	Preschool	Elementary	Elementary	Elementary	Secondary	Preschool	Elementary	Ungraded	Elementary						
State Name: Montana Enro		Handicap Category		Blind	c	Partially Sighted	Deaf			Hard of Hearing		Emotionally Disturbed	EMR		TMR	- 1	Speech Handicaps	Physically Handicapped						
State	d	eotbr Gode	isH)	H-1		H-2	H-4			H-5	,	H-7	6-H		H-10		H-12	H-16						

Montana Data Period 1969 -1970 Special Education Program Types All Programs * Only one personnel/pupil ratio for teachers in all handicaps and education levels. Therapist ratio is flexible and not defined. 1/12 Education Level All Grades Personnel/Pupil Contact Ratio Occupation Teacher Handicap Category State Name: Montana All Handicaps * Handicap Code

I

Employed Data Period 1969_1970 19 15 7 124 10 18 7 Total 25 3/ 7 3/ . 2 3/ $100\frac{3}{}$ 4 3/ Esti-mated 6 Unspecified Esti-mated Employed Employed Ungraded Esti-mated Esti-mated Employed 15 Secondary Education Level Uk-Unknown 12 7 2 7 14 Employed 10 20 9 109 15 18 18 Elementary Esti-mated 'n 9 24 7 82 1/ Based upon enrollment data only (no waiting list data available)
 2/ Calculations cannot be made due to missing data
 3/ Calculations incomplete due to missing data
 4/ Employment data unavailable Employed 4 Preschool Esti-mated 17 7 7 ~ Deilifted Degree Level Total Total Total Total Total MA MA MA MA BA Uk цķ BA BA ř BA BA A-Aide O-Other T/Emotionally Disturbed State Name: Montana Th/Speech Handicap Occupation T/Hard of Hearing Th-Therapist T-Teacher T/Blind T/Deaf T/TMR T/EMR

Montana

ERIC Full Text Provided by ERIC

State Name: Nebraska

Overview of Special Education Programs

67–68 68–69 Data Period

	·																Ne	bra	sk	a_		
	Itinerant			×			×						×			×			,			. •
Program	Вевоитсе Вевоитсе			X				X		×			×			×						
1	Day Special			Х			×	Х		×					×							
Education	Special			Х			X	Х		×	×		×			×					-	
	Residential			×			×	×		×	×		×			×						
e Ranges	Ungraded										5-21		5-21									•
Level (Age	Secondary	_		14-17			14-17	14-17		14-17			14-17		14-17		14-17					tate
Education I	Elementary			5-13		,	5-13	5-13		5-13			5-13		5-13		5-13					to the st
Edu	Preschool			0-5	·		0-5	0-5					0-5					_				applicable to the state
	Handicap Category ${\cal V}$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally (Disturbed/Handicapped)	Mentally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				If no entry is shown, category is not app
d	eotbreH eboO	H-1	H-2	н-3	H4	H-5	H-6	H-7	H-8	H-9	н-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	-	-	<u> </u>	1 /1

69-89 68-69

Date Period

Enrollments In Special Education

Waiting List **ұл∤ы**Ңұ**ы**ғы TOV All School Srograms 142+ 4645 448 9656 373 85 28 121 Enrollments By Special Education Program Type Коот Resource Special Class Ŋgλ School Special School 320 8 95 9 46 dential Rest-Elementary Elementary Elementary Education Elementary Secondary Secondary Level Special Learning Disabilities Handicap Category Physically Handicapped Visually Handicapped Emotionally Disturbed Hearing, Handicapped Speech Handicaps EMR H-10 | TMR H-12 H-14 H-16 Code 9-H H-9 H-7 Hendleap

Nebraska

j

State Name: Nebraska

 226^{1-132}

69-89 Data Period Personnel/Pupil Contact Ratio

						_											N	Jebi	ras)	c a				
		Itinerant		•							1/8-30*											1/75*	1/75*	
1 68–69	ויייו	Kesoritce			,	1/8 min					1/8-30*	1/4-12		1/8-20	1/8-30								1/75*	
Data Period	Education Program	gbecial Day										1/4-12		1/8-20										
ũ	al Educat	Special	1/8 min				none	1/8-12	1/8-12		1/8-30*	1/4-12		1/8-20	1/8-30					1/5-10	1/5-10			
	Special	Rest- School		5	خ			_	1/8-12	1/8-12		1/5-10	1/5-10	1/8-20	1/8-30	1/30	1/30	1/30	1/30	1/5-10	1/5-10			
tact Ratio		Education Level	Preschool	Elementary	Secondary	Ungraded	Preschool	Preschool	Elementary	Secondary	Ungraded	Elementary	Secondary	Elementary	Secondary	Preschool	Preschool	Elementary	Elementary	Ungraded	Ungraded	Preschool	Elementary	
Personnel/Pupil Contact Ratio		Occupation	Teacher				Aide	Teacher			Therapist	Teacher		Teacher		Teacher	Aide	Teacher	Aide	Teacher	Aide	Speech Therapist	Therapist	
State Name: Nebraska		Handicap Category	Visually Handicapped			·		Hearing Handicapped				Emotionally Disturbed		EMR		Mentally Retarded				TWR		Speech Handicaps		,
St	đe	Handle Code	E-H					9-H				2-H		6-H		H-8	•			H10		H-12		

* Case load

State Name: Nebraska

															Nε	bra	ska	a		
		Itineranti	1/75*	1/75*				1/8		1/8									_	
69-89 1	⊟	уеголисе	1/75*	1/75*			1/8													
Data Period	ion Progre	School Day			1/8-20							•								
ũ	Special Education Program	Special School	ż	5			1/8													
	Speci	Resi- dential School	ċ	ċ			1/10		1/10											
ct Ratio		Education Level	Secondary	Ungraded	Elementary	Elementary	Elementary	Elementary	Secondary	Secondary										
Personnel/Pupil Contact Ratio		Occupation	Therapist		Teacher	Diagnostician	Teacher	Teacher/Homebound	Teacher	/Homebound										
State Name: Nebraska		Handicap Category	H-12 Speech Handicaps (cont.)		Special Learning Disa-	abilities	H-16 Physically Handicapped				×.									
St	₫e	Handle Code	H-12		HH 4		H-16													

Esti-mated Employed 3,5 67-68 68-69 ဖ 8 15 19 Total $5-12^{2}/$ $11-22^{2}$ જ Data Period Esti-Unspecified Special Education Personnel Estimated Requirements/Employment Comparison1/Ungraded Esti-mated Employed Secondary Education Level 4-8 Employed Elementary = 7-142/ 5-122/ Esti-mated Esti-mated Employed Preschool Certitied Degree Level None None None Total None Total Total Total Total MA MA MA MA BA æ 죎 BA A=Aide O=Other T/Physically Handicapped Th/Hearing Handicapped A/Emotionally Distrubed T/Emotionally Disturbed State Name: Nebraska T/Visually Handicapped A/Visually Handicapped A/Mentally Retarded Occupation I/Mentally Retarded T=Teacher Th=Therapist A/EMR T/EMR

1/ Based upon enrollment data only (no waiting list data available)
 2/ Calculations incomplete due to missing data
 3/ Calculation cannot be made due to missing data
 4/ Employment data unavailable

Nebraska

 112

1.5

<u>5</u>5

2.5

ત્યુ

Total

Esti-mated Employed 69-89 Total 32-642/ $32 - 64\frac{2}{4}$ જ 8 Data Period Esti-mated Employed Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison \mathbb{L}' Ungraded 32-642/ $32 - 64\frac{2}{4}$ Esti-mated Employed Secondary Education Level Employed Elementary Esti-mated Based upon enrollment data only (no waiting list data available) Esti-mated Employed Preschool Calculations incomplete due to missing data Calculation cannot be made due to missing data Employment data available Certified × Degree Level Total Total Th/Speech of Emotionally Disturbed MA O/Mentally Retarded Psychologist MA MA MA A=Aide O=Other Th/Mentally Retarded Speech State Name: Nebraska Th/Speech of Homebound Occupation Th=Therapist T=Teacher T/TMR A/TMR

Nebraska

ERIC Full Text Provided by ERIC

Data Period 1968 - 1969

Overview of Special Education Programs

_	·	_	_	-		_	,					r -	-		<u> </u>		 1	- 7		N	evė	da			_
.am	Коот		_																						
Program	Веволисе																	×							
Education	Specia l Day				×	X		X		×							×		×						
Educ	Special							X				j										!			
	Residential							X																	
3)																					-				
Ranges																						•			
(Age l																									
Level																						ıte			
Education Level (Age Ranges)																						the sta	•	•.	
Educ	Unspecified				3-21	3-21		3-21		3-21							3-21	3-21	3-21			not applicable to the state			
												nal)										applic	•		
												Institutional)			es							_			
	ory <u>L</u> /			ਰ			-	ed.							abi liti		ped					tegory			
	Catego		þe	cappe		D.	sapped	isturb	ded			Severe,	aps	aring	og Dis		dicap		capped			m, ca	•		
	Handicap Category ⅓		Sight	Handi		Hearin	Fandi	lly D	. Retar			odial,	fandic	nd He	earnir	ured	ly Han	nd	Handicapped			s show			
	Hanc	nd	Partially Sighted	Visually Handicapped	af	Hard of Hearing	Hearing Kandicapped	Emotionally Disturbed	Montally Retarded	iR.	IR.	MR (Custodial,	Speech Handicaps	Spaech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Multiple			If no entry is shown, category is			
		Blind	Pel	Vis	Deaf	He		Em	Mic	EMR	TWE											If no e			
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	8-11	6-5	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-18			1			



Enrollments In Special Education

Data Period 1968 - 1969

Nevada Waiting List ‡ла**ф**лгфиф**т**сфи Enrollments By Special Education Program Type Resource Room 78 Special 1459 44 482 137 Day Special 45 9 Residential 90 24 Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Education Level Handicap Category Physically Handicapped **Emotionally Disturbed** MR (Institutionalized) Hearing Handicapped Mentally Retarded 1/ 1/ Includes TMR and EMR Home Bound H-16 H-17 H-11 Handicap Code H-8 H-6 H-7

Section 2

J

]

ERIC Full Text Provided by ERIC

State Name: Nevada

Nevada Data Period 1968-1969 Special Education Program Types Day Special 1/10 1/12 1/10 1/10 1/12 9/1 1/8 1/8 1/9 1/9 1/6 1/6 1/8 1/8 1/5 Intermediate Intermediate Intermediate Intermediate Education Level Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Preschool Preschool Primary Primary Primary Personnel/Pupil Contact Ratio Aide (with teacher) Aide (with teacher) Occupation Teacher Teacher Teacher Handicap Category State Name: Nevada Partially Sighted Deaf Blind Handicap Code H-2 H-1 H-4

ERIC Full Text Provided by ERIC

္အ	State Name: Nevada	Personnel/Pupil Contact Ratio	act Ratio	Data Period 1968-1969	6961
de				Special Education Program Types	S
Handic Gode	Handicap Category	Occupation	Education Level	Day Special	
H-5	Hard of Hearing	Teacher	Preschool	1/5	
		:	Primary	1/5	
			Elementary	1/6	
			Intermediate	. 1/8	•
			Secondary	1/8	
H-7	Emotionally Disturbed	Teacher	Preschool	1/6	
			Primary	1/6	
			Elementary	1/8	
			Intermediate	1/10	
			Secondary	1/10	
6-H	EMR EMR	Teacher	Preschool	1/8	
			Primary	1/10	
			Elementary	1/12	
			Intermediate	1/14	
			Secondary	1/14	
		Aide (with teacher)	Preschool	1/12	
			Primary	1/14	
			Elementary	1/16	
			Intermediate	1/18	
			Secondary	1/18	
H-10	0 TMR	Teacher	Preschool	1/6	
			Primary	1/8	
		•			

Nevada

Nevada Data Period 1968-1969 Special Education Program Types Day Special 1/10 1/70 1/16 1/10 1/10 1/12 1/14 1/10 1/10 1/12 1/12 1/12 1/10 1/14 1/5 1/8 1/8 1/5 Intermediate Intermediate Intermediate Intermediate Intermediate Education Level Elementary Elementary Elementary Elementary All Grades Elementary All Grades Secondary Secondary Preschool Preschool Preschool Preschool Primary Primary Primary Primary Personnel/Pupil Contact Ratio Aide (with teacher) Aide (with teacher) Occupation Therapist Teacher Teacher Teacher Teacher Physically Handicapped Multiple Handicapped Handicap Category Speech Handicaps State Name: Nevada TMR (cont.) Homebound H-16 Handicap Code H-10 H-12 H-18 H-17

Data Period 1968-1969 Special Education Program Types Day Special 1/10 1/12 1/14 1/14 1/9 Intermediate Education Level Elementary Secondary Secondary Preschool Primary Personnel/Pupil Contact Ratio Aide (with teacher) Occupation Teacher Multiple Handicapped Handicap Category State Name: Nevada (cont.) H-18 Handicap Code

ERIC

236

Nevada

Employe Data Period 1968 -1969 16 26 24 17 Total Employed 16 202 24 Unspecified 0 17 Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1Ungraded Esti-mated Esti-mated Employed Secondary Education Level Employed Elementary Esti-mated Employed Preschool Esti-mated Calculations cannot be made due to missing data Degree Level (설) gk g ää ă ď ğ ă ğ T/Neurological Handicapped A-Aide O-Other T/Physically Handicapped T/Multiple Handicapped T/Emotionally Disturbed T/Visually Handicapped T/Socially Maladjusted T/Hearing Handicapped State Name: Nevada T/Mentally Retarded Occupation Uk-Unknown T-Teacher Th-Therapist 1/EMR T/TMR

ERIC*

Nevada

Data Period 1968 - 1969

State Name: New Hampshire Overview of Special Education Programs

		,						—-т			- ,				<u></u> -			~	1	Vev	VΗ	ampshire
									}													
	Itinerant	×						×			-						×					
Program	Kesomce							×														
1	Day Special		-		×			×		×	×											
Education	Special School				X		.]			×	×				×		×					·
	Residential				×			×		×	×											
s)																						
e Ranges)	U ngraded							5-20			5-20	·										·
Level (Age	Secondary	13-18			13-20			13-18	•	13-18	13-18				13-18		13-18					ıte.
Education L	Elementary	5-12			6-12			5-12		5-12	5-12				5-12		5-12					o the sta
Educ	Preschool	3-5			4-5																	icable t
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally (Disturbed/Handicapped)	Mentally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				If no entry is shown, category is not applicable to the state.
	qepibrsH eboD	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-H	H-10	H-11	Z1-H	H-13	H-14	H-15	91-H	H-17				1/ II



New Hampshire

State	State Name: New Hampshire	Enrollments In Special Education	ecial Educat	tion		Data Pe	Data Period 1968 –	- 1969
dı	•		Enrollments		By Special Education Program	tion Progra	am Type	
solbraH Sode	Handicap Category	Education Level	Residen- School	Special School	Day Special Class	goom Resontae	Itinerant	Waiting *
H-1	Blind	Ungraded			ıl 💮		96	
H-4	Deaf	Preschool			8			
		Elementary	93					
		Secondary	13					
		Ungraded		11				35 all
H-7	Emotionally Disturbed	Ungraded	.123		11	2	66	1047 andes
6-H	EMR	Elementary	9/					
		Ungraded		242	1134			16 all
H-10	TMR	Ungraded		40				
H-16	Physically Handicapped	Ungraded		15			90	108 grades
					•			
					•			
							-	
_								
					-			
*Wait	*Waiting List data incomplete							

New Hampshire

St	State Name: New Hampshire	Personnel/Pupil Contact Ratio	act Ratio		Ã	ata Perioc	Data Period1968 - 1969	69
₫€				Specie	al Educat	Special Education Program	am Types	
atc:		Occupation	Education		i	Day	000000	1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to
Hano	Handicap Category		Level	Kesiden Special tial School School		Special	Room	Trinerand
H-1	Blind	Teacher	Elementary			1/15		
H-4	Deaf	Teacher	Preschool		1/8			
:		,	Elementary		1/8			
H-7	Emotionally Disturbed	Teacher	Elementary	1/10		1/10	1/10	1/10
	•		Secondary	1/10				
		Teacher/State	Ungraded	1/5				
		Aide/State	Ungraded	ż				
H-9	EMR	Teacher	Elementary		1/15	1/15		
!			Secondary			1/15		
		Teacher/State	Elementary	1/8-15				
		Aide/State	Elementary	1/10-19*				
H-10	TMR	Teacher	Elementary		1/10	1/10		
		Teacher/State	Ungraded	1/4-8				
H-14	Special Learning	Teacher	Elementary		1/15			
	Disabilities	Teacher	Ungraded	1/15				
H-16	Physically Handicapped	Teacher	Elementary		1/15			
			Ungraded	1/15				
			,					
*Add	1 2-4 children to class		•					

ERIC Full Text Provided by ERIC

Employed 21 4/2 Data Period 1968-1969 113 117 38 17 42 Total જા J) 9 199 75 4-7 Employed Unspecified Esti-mated Uk - Unknown 1993 Employed Special Education Personnel Estimated Requirements/Employment Comparison ${
m I}/$ Ungraded 7 752/ Esti-mated 7-143/ ल्राह्म Calculations cannot be made due to missing data.

Calculations incomplete due to missing data (estimated requirements are not calculated by degree level).

Employment data unavailable. ¢ Esti-mated Employed 12 12 12 Secondary Education Level लं Esti-mated Employed 105 91 26 9 7 101 Elementary /7 जान 4-7 Based upon entollment data only (no waiting list data available). Esti-mated Employed Preschool /7 Certified Degree Level š Jone None ř ğ ď otal K Cotal Ğ B BA T/Special Learning Disabilities 1/ State Name: New Hampshire 0=Other A=Aide T/Physically Handicapped T/Emotionally Disturbed A/Emotionally Disturbed Occupation Th=Therapist T=Teacher ${
m T/Blind}^{
m L}$ T/Deaf A/EMR T/TMR T/EMR ने जो लो की

New Hampshire

Overview of Special Education Programs

Data Period 1968 -69

State Name: New Jersey

New Jersey Boom Reconce Boom Reconce Boom Reconce Boom Recipies Class Cla	Resource Resource Recourse Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial Recial
	e to the state
	3. C. C. C. C. C. C. C. C. C. C. C. C. C.
	-20 -20 -20 -20 -20 -2
	-20 -20 -20 -20 able to the state
	-20 -20 -20 sable to the state
	-20 -20 -20 able to the state
	-20 -20 -20 able to the state
	-20 -20
	-20 sable to the state
	able to the state
	able to the state

Data Period 1968-69

Overview of Special Education Programs

_	,	<u> </u>		_		-	_	, -			, –	 	т	 	1 - 1	<u>vew</u>	<u>, je</u>	rse	<u>y</u>		
	Kesomrce								 												
Education Program	Individual Instruction																	-	ļ.	•	
	Cooperative Special						. 6	Jael!											ŀ		
	Special Special Class							delik	70,70												
	Special School									e ^x eC											
	Residential Special Class		·									·			·						
s)							·			-											
Education Level (Age Ranges)				<u> </u>															•	is not applicable to the state	
el (Age				_		-					-	 									,
Leve											_	 L							state		
cation																	•		o the		•
Edu	Ungraded																		dicable t		
	Jategory 1/	Perceptually Handicapped		-																	
	Handicap Category																		If no entry is shown, category		
	Handicap Gode																		Y		<u>.</u>

State Name: New Jersey

Enrollments In Special Education*

Data Period 1968-69

New Jersey Waiting List Mot available Resource Enrollments By Special Education Program Type 20 9 S Room Coopera- Individual tive Instruc-Special tion 22 14 σ * Only the number of classes or units are available at state level except for the above 50 139 139 15 13 41 Day Special Class 24 17 21 dential Special Class 92 147 231 Resi-21 Education Elementary Elementary Secondary Secondary Preschool Preschool . Level Ungraded Ungraded Handicap Category Hard of Hearing Deaf Handicap Code H-5 H-4

State Name: New Jersey

Data Period 1968-69 Special Education Program Types Programs 1/10 1/15 1/15 1/12 1/12 1/8 All Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Education Level Personnel/Pupil Contact Ratio Occupation Teacher Teacher Perceptually Handicapped Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Physically Handicapped Multiple Handicapped Emotionally Disturbed Visually Handicapped Socially Maladjusted Hearing Handicapped State Name: New Jersey Handicap Category Speech Handicaps Chronically Ill TMR EMR Handicap Code I-10 [-12]1-16 I-18 1-20 I-239**-**I 6-1 I-3 1-7

New Jersey

ERIC Full Text Provided by ERIC

New Jersey Esti-mated Employed 125 64 167 1074 1561 305 53 Data Period 1968-69 Total 130 Esti-mated Employed 13 29 1074 313 305 11 420 44 13 167 1561 125 23 Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison $1/\sqrt{1}$ Ungraded 21 Esti-mated Employed Secondary Education Level 22 Esti-mared Employed Elementary 73 Esti-mated Employed Preschool 1/ Calculations cannot be made due to missing data 14 Degree Level Uncer Total None Total None Total None Total None MA A-Aide O-Other I/Physically Handicapped State Name: New Jersey T/Visually Handicapped . T/Hearing Handicapped T/Speech Handicaps Occupation T-Teacher Th-Therapist T/EMR

New Jersey Esti-mated Employed 190 192 13 73 Data Period 1968-69 Total Esti-mated Employed 132 192 13 47 190 194 73 277 Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison Ungraded Esti-mated Employed Secondary Education Level Esti-mated Employed Elementary Esti-mated Employed Preschool $\underline{1}/$ Calculations cannot be made due to missing data Certified Degree Level None Total T/Physically Handicapped (cont) Total T/Socially—Emot, Maladjusted None Total MA A-Aide O-Other State Name: New Jersey Occupation I/Other Teachers T-Teacher Th-Therapist

- Carrier Street

	·																			N	ew	Mexico
E						·								·								
Program	Itinerant												×					×				
ation	Cooperative Class							×		×	×						×					
Education	Day Dectal Class			×			X	×	×	×	×				×		×					
	Residential			×			X	×		×	×									X		
3)				·																		
re Ranges)	All Grades												6-21					6-21	_			•
Level (Age	Secondary			13-21			13-21	13-21	13-21	13-21	14-21				13-21		13-21			13-81		ate.
Education 1	Ejeweutst			6-12		•	6-12	6-12	6-12	6-12	5-13				6-12		6-12			6-12		o the st
Edu	Preschool			3-5			3-5				2-4											icable t
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Mentally Retarded (combined classes)	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebourd	Other Health Impaired (more than 1	handicap per class)		1/ If no entry is shown, category is not applicable to the state.
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-25			17 11



Waiting List NO DATA AVAILABLE Date Period 1969-1970 Enrollments By Special Education Program Type Itinerant Coopera-48 24 492 344 50 28 Class tive 48 ** Special 162 58 870 89 128 48 1182 45 102 42 97 91 14 Class Enrollments In Special Education Day * No data available, program not officially special education ** Experimental programs - handicap in process of being legalized Residen-School 80 108 150 180 46 92 123 7.1 44 44 tial Elementary Elementary Education Elementary Elementary Elementary All Grades Elementary Elementary All Grades All Grades All Grades All Grades Secondary Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Level Special Learning Disabilities Trainable Mentally Retarded Educable Mentally Retarded Physically Handicapped Handicap Category **Emotionally Disturbed** Visually Handicapped Hearing Handicapped Speech Handicapped State Name: New Mexico Mentally Retarded. H-14 H-16 Handicap Code H-10 H-12 9-H H-3 H-8 **L-H** 6-H

New Mexico

ERIC Foulded by ERIC

The state of the s

Waiting List Date Period 1969-1970 Enrollments By Special Education Program Type Itinerant 188 Coopera-tive 27 Class Day Special Class 119 294 Enrollments In Special Education Residen-tial School Education Level All Grades Elementary Secondary Handicap Category Other Health Impaired State Name: New Mexico Homebound H-25 Handicap Code H-17

New Mexico

New Mexico Data Period 1969-1970 Special Education Program Types Itinerant Coopera-Class 1/14 1/12 tive Special Class 1/12 1/10 1/10 1/12 1/12 1/12 Day 1/8 1/8 dential 1/10 1/18 1/18 1/16 1/16 1/12 School 1/18 Resi-1/8 1/6 1/8 Personnel/Pupil Contact Ratio Education Elementary Elementary All Grades Elementary All Grades All Grades All Grades Elementary All Grades All Grades All Grades All Grades Preschool Secondary Secondary Secondary Preschool Level * This handicap category is in process of being defined Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher H-10 Trainable Mentally Retarded Teacher Aide Aide Aide Aide Educable Mentally Retarded Special Learning Disability HH6 Physically Handicapped State Name: New Mexico Handicap Category Visually Handicapped **Emotionally Disturbed** H-6 Hearing Handicapped Mentally Retarded Handicap Code H14 H-3 H-7 H-8 6-H

New Mexico Esti-mated Employed 282 Data Feriod 1969-1970 23 22 23 35 Total 16.5²/36²/ 236 2/ 99 157 Esti-mated Employed 30 13 14 19 Unspecified 01 18 16 Employed Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Employed mated 6 25 16 106 14 25 Uk - Unknown Secondary Education Level 932 33 20 Esti-mated Employed 21 146 10 15 9 Elementary 127 2/ 15 9 7 1 127 Based upon enrollment data only (no waiting list data available) Esti-mated Employed Ξ Preschool 5. 26 2/Galculations incomplete due to missing data
3/Galculations cannot be made due to missing data
4/Employment data unavailable ×× Certified X Degree Level Total Higgs 늄 сķ 뇜 g g цķ Ωķ цķ Ωķ g T/Special Learning Disabilities A=Aide O=Other T/Physically Handicapped State Name: New Mexico I/Emotionally Disturbed T/Cther Health Impaired I/Visually Handicapped T/Hearing Handicapped A/Emotionally Disturbed T/Mentally Retarded A/Mentally Retarded Occupation T/Homebound Th=Therapist T=Teacher

New York

NO SPECIAL EDUCATION DATA

WAS PROVIDED BY NEW YORK STAT

North Carolina Data Period 1968 - 1969 Contained (Full-Time) -lle8 Education Program (Part-Time) Bjock Cjess Itinerant Коот **Kesonrce** Special Special KI CO JA Residential Overview of Special Education Programs Educatic: Level (Age Ranges) 13-18 13-18 13-18 13-18 13-18 13-18 13-18 13-18 **Recordary** If no entry is shown, category is not applicable to the state. 6 - 126-12 6 - 126-12 6 - 126-12 6-12 6 - 12E Je wentary Preschool Severe, Institutional) (Crippled) Special Learning Disabilities Handicap Category Physically Handicapped Stars Morth Carolina Emotionally Disturbed Visually Handicapped Hearing Handicapped Speech and Learning Speech Handicaps **Mentally Retarded** Partially Sighted Hard of Hearing MR (Custodial, Brain Injured Homebound TMR EMR H-13 H-14 H-15 H-16 H-10 H-11 H-12 H-17 9-H Code H-2 H-8 H-3 H-5 6-H F--H H-7 qevibneH

North Carolina Waiting List Data Period 1968 - 1969 Self- W Contained (Full-time) Enrollments By Special Education Program Type Block Class (Part-time) (TO THE PERSON OF THE PARTY OF T Itinerant Resource Room Enrollments In Special Education Residental Special Class Education · Level Handicap Category State Name: North Carolina Handicap Code

Townson or the last

1

/12-1/16 Contaired 1/10 1/10. 1/12 (Full-time) Self Data Period 1968 - 1969 Special Education Program Types Itirerant (Part-time) Class 1/6 Block /6-1/12 1/100 Resource 1/25 1/25 Room 8 All Grades* Education Elementary All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Level Personnel/Pupil Contact Ratio Occupation H-14 Special Learning Disabilities Teacher Teacher Teacher Teacher Teacher Educable Mentally Retarded Teacher Teacher Teacher Trainable Mentally Retarded Teacher State Name: North Carolina H-16 Physically Handicapped MR (Custodial) Severe, Emotionally Distrabed Visually Handicapped Hearing Handicapped Handicap Category Institutionalized H-12 Speech Handicaps Small Class H-7 H-10 Handicap Code H-6 u H HIL H-3

North Carolina

State Name: North Carolina	Speci	al Ec	ducation	al Education Personnel Estimated Requirements/Employment Comparison	Estimated	d Requiren	nents/En	ployment	Comparis	son		Data P	Data Period 1968-1969	8-1969
Occupation		pəj				Education		Level					,	
T=Teacher A=Aide	Degree	1333-	Preschool	hool	Elementary	ntary	Secondary		Ungraded	aded	Unspecified	cified	Total	15
lst	Level	i9O	Esti- mated	Employed	Ssti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed
T-Emotionally Disturbed	ВА	×										17		17
	MA	×										3		3
	Uk											6		6
	Total										Æ	29	/ī	29
A-Emotionally Distrubed	BA	×										2		2
	None	×					,					2		5
	Total										7/	-2	7	7
Th-Occupational	BA	×										1	$I_{\overline{I}}$	1
T-EMR	Uk											31	/ī	31
T-TMB	None											29		29
	Ūķ											2		2
	Total										77	31	1/	31
T-Mentally Retarded	BA	×										6		6
•	MA	×										2		2
	None											4		4
	Total										1/	13	1/	13
A-Phychologist	BA										1/	1	1/1	-
											٠			
1/ (1) missions cannot be made due to mission data	die to	1551	ים קשנים				ļ							
		1001	• papa ña											

North Carolina

														_	N	orth	Da	kot	a		
	gnbbjemen- tary Instruc- tion					X		Х							×						
E	Itinera nt				·			X					×	,			×				
Program	уоош Кезоитсе	Х													×						,
	Day Special					×				Х	X										
Education	Special										×										
	Residential School	X	Х		X	×		X		×	Х						×				
s)		-																			·
Ranges)								_												 	*.
(Age	<u> - </u>										_						_	_			. m
Level (Ungraded										6-21	·	6-21					! 			n state e state
Education]	Secondary	15-21	15-21		15-20	15-21		15-21		15-21	15-21				15-21		15-21				ogram i
Edu	Ejementary	6-14	6-14		5-14	6-14		6-14		6-14	6-14		1,		6-14		6-14				ut no pr applicał
	Handicap Category $^{1}/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Mentally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech: Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound (included in itinerant)			North Dakota has Deaf-Blind Children – but no program in state. $1/$ If no entry is shown, category is not applicable to the state
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17			4 1



Enrollments In Special Education

State Name: North Dakota

Date Period 1968-69

	Waiting List		!	; 	<u></u>	• <u>t</u>	5 6 5 5 6 5	ng p	ro 19	u tu kes	me drei	pţţg	rec 0 c	500 1 D≀ 1 D≀	77. 70u	lcat	Edu Xin	pro	gb seci	gs io	· -	—-i	
η Type	Supple- mentary Instruc- tion							7	0	8	8			٠				32					
Special Education Program	ltinerant									4	4						4004		125	63			
ial Educati	у у у у у у у у у у у у у у у у у у у	. ~	9															244					
y Spec	Class Special Day							9	0			817	191	38	0								
nts B	Special School															19							
Enrollments By	Re s iden- tial School	3	7	19	8	55	24	8	01	61	2.2	13	44	73	56				53	36			
	Education Level	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Ungraded	Ungraded	Elementary	Elementary	Secondary			
	Handicap Category	Blind		Partially		Deaf		Hard of Hearing		Emotionally Disturbed		EMR		TMR			Speech Handicaps	Special Learning Disabilities	Physically Handicapped				
ď	Handics Code	H-1		H-2		H-4		H-5		1-H		6-H		H-10		,	H-12	H-14	H-16				

North Dakota

Supple-mentary Instruc-tion 1/10 1/10 1/10 Data Period 1968-69 1/35 Gase Special Education Program Types 1/5 day 1/5 day Itinera*n*t 1/10 у Везоптсе gol Class Day Spec 101-Scrool Special School 1/6-15 1/6-15 none none none none none none none none none none none dential none Resi-Elementary Elementary Elementary Elementary Elementary Elementary All Grades All Grades Elementary All Grades Elementary Elementary All Grades All Grades Elementary Education Secondary Secondary Secondary Secondary Secondary Secondary Secondary Personnel/Pupil Contact Ratio Level Teacher/Supplementary Teacher/Supplementary Teacher/Homebound Visiting Counselor Occupation Teacher/Braille Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher State Name: North Dakota Emotionally Disturbed Visually Handicapped Handicap Category Hearing Handicapped Mentally Retarded Partially Sighted Hard of Hearing Blind EMR H-8 Handicap Code 6-H H-1 H-2 H-3 H-5 |9-H H-7

North Dakota

Supple-mentary Instruc-tion 1/10 Data Period 1968-69 1/35 Case 1/35 Case 1/35 Case Special Education Program Types /10 Gase 80-80/wk 1/5 day 1/5 day Itinerant 1/10 Коот Boom Special Day 6-15 21-9 School none Special School 1/20-22 1/7-14 **d**ential Fesi-Personnel/Pupil Contact Ratio Elementary Elementary Elementary Elementary Elementary All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Education All Grades All Grades All Grades All Grades All Grades Secondary Secondary Secondary Level Rehabilitation Counselor Occupational Therapist Supplementary Teacher Teacher/Homebound Remedial Evaluator Physical Therapist Visiting Counselor Occupation Speech Therapist Speech Therapist Psychometrist Sccial Worker Psychologist Psychologist Therapist Teacher Teacher Teacher Teacher Teacher Teacher Nurse Physically Handicapped Special Learning Disa-State Name: North Dakota Handicap Category Speech Handicaps All Handicaps bilities EMR (cont.) TMR H-10 H12 开4| H-16 Handicap Code

North Dakota

A STATE OF THE PARTY OF THE PAR

Employed œ 16 197 11 24 204 10 10 16 11 45 23 10 108 Data Period 1968-69 Total 77 291-99 10-1627 772 3-62 Esti-mated Esti-mated Employed 10 10 10 10 01 10 10 Unspecified -3/ ٠Ĵ Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison \mathbb{L}' Ungraded Esti-mated Employed 9 12 4 9 16 Secondary Education Level 7-132 ો 12-31 7 Esti-mated Employed Elementary 15 197 198 41 41 82 9 54-136 772 320 7 3-6 Esti-mated Employed Preschool Certitied Degree Level None None Total HEER Total Total Total Total Total MA 图片 늄 Uk K B цķ g BA BA O/Counselor Emotionally Dis-A=Aide O=Other State Name: North Dakota I/Emotionally Disturbed T/Visually Handicapped T/Hearing Handicapped T/Mentally Retarded Occupation turbed T=Teacher Th≕Therapist T/EMR T/TMR

2/Based upon enrollment data only (no waiting list data available) 3/Galculations incomplete due to missing data Calculation cannot be made due to missing data Uk-Unknown

j

North Dakota

Esti-mated Employed 45 10 55 88 185 32 Data Period 1968-69 Total 42-50 2/ 99-09 22 Esti-mated Employed 45 10 55 Unspecified 99-09 Special Education Personnel Estimated Requirements/Employment Comparison $^{1/}$ (cont.) Esti-mated Employed mated Employed Ungraded Secondary Education Level 14-17 Esti-mated Employed ~ 85 7 32 176 Elementary 28-33 22 Based upon enrollment data only (no waiting list data available) Esti-mated Employed Preschool Calculations incomplete due to missing data Calculation cannot be made due to missing data Uk-Unknown Certified Degree Level None Total Total MA ď BA ğ MA ä BA M T/Special Learning Disabilities A=Aide O=Other State Name: North Dakota T/Physically Handicapped Occupation Th/Speech for TMR O/Social Worker O/Psychometrist Th=Therapist T=Teacher Th/Speech 그의의

North Dakota

ERIC Aral Postdod by CIDC

Transport of the last of the l

and the second

.

No.

Data Period 1968 - 1969

Overview of Special Education Programs



State Name: Ohio

Enrollments In Special Education Ohio State Name:

Data Period 1968 - 1969

Ohio Waiting List Enrollments By Special Education Program Type Special Class 727 38746 1145 1551 1127 1477 Day Residen-tial 329 Ungraded Ungraded Ungraded Ungraded Ungraded Ungraded Education . Level Physically Handicapped Handicap Category Emotionally Disturbed Visually Handicapped Brain Injured Deaf EMR Handicap Code H-16 H-15 H-7 H-3 H-9 H-4

							Ohio	
69	Itineran	'	8/1					
1968 - 19	am Types Resource Itinerant Room		01/1-9/1		30			
Data Period 1968 - 1969	tion Progre Coopera- tive Special	Class		/8-1/101/8-1/12	1/12-1/30			
Ä	Special Education Program Day Coopera- iden-Special tive Res Class Special Roc	1/8-1/12	1/6-1/8	1/8-1/10	8-1/124/6-1/15 1/12-1/2 1/12-1/22 1/12-1/	1/8-1/18 1/8-1/8 1/8-1/12		
	Speci Residen- tial			61/1-8/1	1/8-1/12			
ct Ratio	Education Level	Elementary	Preschool Elementary Secondary	Ungraded	Ungraded Elementary Secondary	Elementary Secondary Ungraded		
Personnel/Pupil Contact Ratio	Occupation	Teacher	Teacher	Teacher	Teacher	Teacher		
State Name: Ohio	Handicap Category	Visually Handicapped	Deaf	1 1	Emotionally Disturbed	Physically Handicapped (Crippled)		
Ste	Handicap Code	H-3	H-4	H-5	H-H	H-16		



Esti-mated Emplored Data Period 1968-1969 9 166 226 16 56 72 Total 95-143 75-187 2 7 Esti-mated Employed 166 226 16 56 72 9 Unspecified 7 ત્રા Esti-mated Employed mated Employed ला ला Special Education Personnel Estimated Requirements/Employment Comparison $\underline{1}/$ Ungraded 95-143 75-187 Secondary Education Level Esti-mated Employed Elementary $\frac{1}{2}/\text{Based}$ upon enrollment data only (no waiting list data available) $\frac{2}{3}/\text{Calculations}$ cannot be made due to missing data $\frac{3}{3}$ Employment data unavailable UK – Unknown Esti-mated Employed Preschool Certified × × Degree Level Uk Total Uncer tified Uk Total High ğ Uk λ=Aide O=Other T/Emotionally Disturbed T/Visually Handicapped T/Hearing Handicapped Occupation State Name: Ohio T=Teacher Th=Therapist T/Crippled

Ohio

ERIC Full Text Provided by ERIC

。 1915年,1917年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,19

Targetter.

						_														Ok la	<u>aho</u>	ma		
																						,		
ram										_		_		·		_		_	·					
Program	Itinerant												×					×	×			이		
ition	Cooperative Class									×							-					Scho		
Education	Day Special Class			×			X	×		×	X				×		×					*Private School		
	Residential School			×			×			* ×			,	ė		_	×					*		•
Ranges)																				_		·	•	
	səberə IIA			6-21			6-21	6-21			6-21		6-21		6-21		6-21	6-21						
Lavel (Age	Secondary						•			12-21													ite.	
	Elementary						-			6-11													not applicable to the state.	•
Education																				_			ole to	
	Preschool			2-5	٠.		2-5			2-2	2-5								2-2				plical	
												utional)			·								ot ap	
															1								is	
	y 1/										·	, Instit					q						tegor	
	Handicap Category			ped			ped	Emotionally Disturbed	_			Severe,	u	ρū	ies		Physically Handicapped		ped				r, ca	
	. Cat		ited	Handicapped		ing	Handicapped	Dist	Montally Retarded	ped			Correction	Spaech and Hearing	Learning Disabilities		andic		Multiple Handicapped				hown	
	dicap		Sighted			Hear	Hand	111y	Ret	licap		odia	Corr	nd F	Disa	ured	ly H	pu	Hand				iss	
	Hanc	ีซ	Partially	Visually	Ţ.	Hard of Hearing	Hearing	tione	telly	EM Handicapped		MR (Gustodial,		sch a	ning	Brain Injured	ical	Homebound	iple				entry	
	•	Blind	Part	Vist	Deat	Har	Hea	Emo	Mer	EX	TMR	MR (Speech	8್ಲ	Lear	Brai	Phys	Hom	Muli				If no entry is shown, category	
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	6-년	H-10	H-11	H-12	ਜ-13	H-14	H-15	H-16	H-17	H-18				1/1 I	



Stat	State Name: Oklahoma	Enrollments In Special Education	Special Edu	ıcation		Data Per	Period 1968-69	
qв			Enrollments	By	Special Education Program Type	on Progran	ר Type	
Flandic Sode	Handicap Category	Education Level	Resi- dential School	Day Special Class	Coopera- tive Class	Itinerant	Estimate of unserved popu-lation*	Waiting List
H3	Visually Handicapped	Unspecified	135	44			944	
9H	Hearing Handicapped	Unspecified	241	116			6048	
H7	Emotionally Disturbed	Unspecified		68			9616	
6Н	Educable Mentally Handicapped	Preschool	41**					Ε
		Elementary		2878				Т
		Secondary		1235	992			В
		Unspecified	22**	401			9135	Ą
H10	Trainable Mentally Retarded	Unspecified		808			1232	Т
H12	Speech Correction	Unspecified				7917	19295	I
H14	Learning Disabilities	Unspecified		301			9472	7 /
H16	Physically Handicapped	Unspecified	80.	152			936	, A
H17	Homebound	Unspecified				873		,
H18	Multiple Handicapped	Unspecified				12	.	
								L
								. 0
								N
		-						
* Ba:	* Based upon prevalence rates ** Private School							

Personnel/Pupil Contact Ratio

Data Period 1968-69

Education Resi- Day Gooper- Itinerant Special All Grades 1/5 1/8			30:10		Spe	cial Educ	ation Pro	Special Education Program Types	S
Level dential Special ative Ithnerant All Grades 1/5 1/8 All Grades 1/6 1/8 All Grades 1/10 1/15 1/30 Preschool 1/15 1/15 Secondary 1/15 1/30 All Grades 1/10 1/40 All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/12 1/12	Occupation			Education	Resi-	Day	Cooper-		
All Grades 1/6 1/8	Halidicap Category			Level	dential School	Special Class	ative Class	Itinerant	
All Grades 1/6 1/8 All Grades 1/8 Preschool 1/15 Elementary 1/15 1/30 Secondary 1/15 1/30 All Grades 1/7 1/15 All Grades 1/10 1/40 All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/40 1/12 All Grades 1/12 1/12	Visually Handicapped Teacher	Teacher			1/5	1/8			
All Grades 1/8 Preschool 1/20 Elementary 1/15 Secondary 1/15 All Grades 1/7 1/15 All Grades 1/10 1/40 All Grades 1/8 1/8 All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/10 1/12 All Grades 1/10 1/12	Hearing Handicapped Teacher	Teacher		All Grades	1/6	1/8			
Preschool 1/20 Elementary 1/15 1/30 Secondary 1/15 1/30 All Grades 1/7 1/15 1/30 All Grades 1/10 1/40 1/85 All Grades 1/8 1/8 1/85 All Grades 1/4 1/8 1/20 All Grades 1/40 1/20 All Grades 1/40 1/20 All Grades 1/40 1/12 All Grades 1/12 1/12	Emotionally Disturbed Teacher	Teacher		All Grades		1/8			
Elementary 1/15 1/30 Secondary 1/15 1/30 All Grades 1/10 1/40 1/80 All Grades 1/4 1/8 1/85 All Grades 1/4 1/8 1/85 All Grades 1/4 1/8 1/20 All Grades 1/4 1/8 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/12 1/12	ally Handi-	Teacher (Mental	ly Handi-	Preschool	1/20				
Secondary 1/15 1/30 All Grades 1/7 1/40 1/40 apped All Grades 1/10 1/40 1/85 All Grades 1/8 1/85 1/85 All Grades 1/4 1/8 1/20 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/12 1/12	capped capped	capped		Elementary		1/15			
All Grades 1/7 1/15 All Grades 1/40 1/40 apped All Grades 1/8 1/85 All Grades 1/4 1/8 1/85 All Grades 1/4 1/8 1/20 All Grades 1/40 1/12 All Grades 1/40 1/12 All Grades 1/12 1/12 All Grades 1/12 1/12 All Grades 1/12 1/12	3		<u> </u>	Secondary		1/15	1/30		
or Secondary 1/40 1/40 apped All Grades 1/10 1/40 1/85 All Grades 1/8 1/85 1/85 All Grades 1/40 1/20 All Grades 1/40 1/20 All Grades 1/40 1/12 All Grades 1/12 1/12 All Grades 1/12 1/12				All Grades		1/15			
All Grades 1/10 1/40 All Grades 1/8 1/85 All Grades 1/4 1/8 All Grades 1/40 1/20 All Grades 1/40 1/12 All Grades 1/12 1/12 All Grades 1/12 1/12	Vocational Instructor	Vocational Instru	ctor	Secondary		1/40			
apped All Grades 1/8 1/85 All Grades 1/4 1/8 1/85 All Grades 1/40 1/20 All Grades 1/40 1/12 All Grades 1/12 1/12 All Grades 1/12 1/12				All Grades	1/10	1/40			
All Grades 1/8 All Grades 1/4 1/8 All Grades 1/40 1/20 All Grades 1/12 1/12 All Grades 1/12 1/12	Trainable Mentally Retarded T/Mentally Handicapped	$I_{\rm L}$	licapped	All Grades		1/8			
All Grades 1/4 1/8 All Grades 1/4 1/8 All Grades 1/40 1/20 All Grades 1/12 All Grades 1/12	Speech Correction Speech Therapist	Speech Therapist		All Grades				1/85	
All Grades 1/4 1/8 All Grades 1/40 1/20 All Grades 1/12 All Grades 1/12	Learning Disabilities Teacher	Teacher		All Grades		1/8			
All Grades 1/40 1/20 All Grades 1/12 All Grades 1/12 All Grades 1/12	Physically Handicapped Teacher	Teacher		All Grades	1/4	1/8			
All Grades 1/20 All Grades 1/12 All Grades 1/12	Physical Therapist	Physical Thera	pist	All Grades		1/40			
1/12	Homebound Teacher (Visiting)	Teacher (Visiti	ng)	All Grades				1/20	•
1/12	Multiple Handicapped Teacher	Teacher		All Grades				1/12	
Oklahoma -	Social Worker	Social Worker		All Grades				1/12	
- Uklahoma									
									/K.Id
na									hor
									HG-



State Name: Oklahoma

a ford 3 Total Data Period 1968-1969 433 1 55 92 38 44 2 Esting Employed 18 30 93 35 87 36 Ξ Unspecified 55 131 12 6 38 7 44 11 Esti-mated Enployed Ungraded Esti-mated Employed 125 Education Level Secondary 108 31 Esti-mated Employed 222 Elementary 192 Esti-mated Employed $\frac{1}{2}$ Based upon enrollment data only (no waiting list data available) Employment data not available Preschoo! Certified × × × × × × × × Degree Level 首首 片 ğ š ă ğ ğ ă ă 벍 ğ I/Children with Learning Dis. A=Aide O=Other T/Physically Handicapped State Name: Oklahoma 1/Mentally Handicapped T/Visually Handicapped T/Emotionally Disturbed I/Multiply Handicapped T/Hearing Handicapped Vocational E.structor Occupation O/Social Worker Uk - Unknown Th-Therapist Th/Physical T=Teacher 費p/Specch T/Visiting

18

35

87

36

28 30

1 442 Oklahoma

 $27\overset{_{1}^{-177}}{1}$

Data Period 1947-1968

Education Program

Rapid Tumover

:letiqeoH

× | Itinerant

Room

Resource

Special Class

Residential

	(8)	Unspecified												6-21								•
S	e Ranges)	Ungraded									6-21											
Special Education Programs	Level (Age	Secondary	13-21	13-21		13-21			13-21		15-21	15-21						13-21		13-21		et .
ducation	Education I	Elementary	6-12	6-12		6-12		•	6-12		6-14	6-14				6-14		6-12		6-12		to the state
ecial Ec	Edu	Preschool				3-5					3-5	3-5		3-5				3-5				υ
State Name: Oregon Overview of Sp		Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed $\frac{2}{}$	Montally Retarded	EMR	IMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities $3/$	Brain Injured	Physically Handicapped	Homebound	Chronic Conditions		If no entry is shown, category is not applicable Called "socially and emotionally maladjusted" Called "extreme learning problems" Also called "Crippled-Orthopedic"
Sta		Handicap Code	H-1	2-H	H-3	H-4	H-5	9-H	7-5	8-1	6-5	H-10	H-11	H-12	4-13	1-14	H-15	91-E	71-I	H-20		ना शाला का

×

×

×

×

×

Oregon

×

×

9-H

H-5

H-10

H-12 H-13 H-14

H-16 H-15

H-17

Oregon

State	State Name: Oregon En	Enrollments In Special Education	ecial Educat	ion		Data Pe	Data Period 1967 –	1968
d			Enrollments		By Special Education Program Type	tion Progra	m Type	
soibr Sode	Handicap Category	Education . Level	Residential Special	Day Special	Resource	Itinerant	Hospital Rapid	Waiting List
ieH)			Cless	Class	Room		Turnover	TE
H-1*	Blind	Preschool	12					bri
		Elementary	39					МQ
		Secondary	44					ис
		Ungraded				105		ΙĄ
H-2	Partially Sighted	Unspecified				446		ΓĄΟ
H-4*		Preschool	.43	24				
		Elementary	140	85		35		
	i	Secondary	90		19			
		Unspecified		163				
H-7	Emotionally Disturbed	Elementary	33	52				
		Secondary	161				70	
H-9	EMR	Preschool	70					612
		Elementary	79	3152				•
		Secondary	83	1128	٠			
		Ungraded	8					8790
H-10	TMR	Unspecified	195					2255
H-12	Speech Handicaps	Preschool				249		
	_	Elementary				8928		
		Secondary				228		
H-14	Special Learning Disabilities	Elementary				5140		
H-16		Preschool		20				
-		Elementary		82			230	
*Deal	*Deaf and Blind data for residential program is 1968-1969	gram is 1968-19	. 69					

Oregon

														,			· · · ·	egc	·11			
1968		Waiting List						TE	ĦΨΊ	ΙΑV	ΑŢ	OM								,	,	
Data Period 1967 -	іт Туре	Hospital Rapid Turnover	25	255	470	50	290															
Data Pe	Enrollments By Special Education Program Type	Itinerant							}													
	ecial Educe	Resource																				
tion	ents By Spe	Day Special Class			!																	•
cial Educa	Enrollm	Residential Special Class																				
Enrollments In Special Education		Education · Level	Secondary	Unspecified	Elementary	Secondary	Unspecified															
State Name: Oregon Enro		Handicap Category	Physically Handicapped	ž	Chronic Conditions																	
State	d	Handica Gode	H-16		H-20																	

Oregon Itinerant 1/70 1/70 1/70 1/10 1/30 1/80 1/9 Data Period 1967 1968 Resource Rapid Room Turnover Special Education Program Types 1/40 1/9 Residen-Day tial Special Special Class 1/10 1/15 1/18 1/12 1/8 1/8 1/8 1/40 1/20 1/40 1/23 1/21 1/6 1/8 1/8 1/e 1/6 1/5 1/6 1/6 Ungraded * Elementary Elementary Elementary Elementary Elementary All Grades All Grades Elementary All Grades Education All Grades Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Preschool Preschool Preschool Level Personnel/Pupil Contact Ratio Speech Correctionist Occupation Counselor Teacher Teacher Teacher Teacher Teacher Teacher Aide Aide * Includes multiple handicapped H-7 | Emotionally Disturbed Handicap Category Oregon H-12 Speech Handicaps H-2 | Partially Sighted State Name: Blind Deaf H-9 | EMR H-10 TMR Handicap Code H-4 H-1

Special Education Program Types Day Special Class 1/10 1/35 1/20 1/20 1/37 1/8 Residential Special Class Elementary Education Elementary Elementary All Grades Elementary Elementary All Grades Secondary Secondary Preschool Preschool Preschool Level Personnel/Pupil Contact Ratio Occupational Therapist Physical Therapist Occupation Teacher/Physical Handicapped Teacher Teacher H-14 Special Learn. Disabilities H-16 Physically Handicapped Handicap Category Chronic Conditions State Name: Oregon H-20 Handicap Code

1/150

1/160 1/120 Oregon

I

1

-

Parker Parker

Partition of the

Itinerant

Resource Rapid Room Turnover

Data Period 1967 1968

1/20

1/25 1/25

Occupation		рэ				Educ	Education L	Level						٠	
T-Teacher A-Aide	Degree	311.	Preschool	hool	Elementary	ntary	Secondary	ıdary	Ungr	Ungraded	Unspecified	cified	Totai	aì	
st	Level	Cer	Esti- mated	Employed	Fsti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	
T/Blind	Uk	×	•	2		5		9				11		24	
	Total		7	2	9	5	L	9			11	11	27	24	
O/Preschool Counselor	Uk			ı										Ī	
	Total		/7	1									2/	1	
T/Partially Sighted	Ωķ	×				14							:	14	. :
	Total				/7	14					14	3/	14	14	
T/Deaf	Uk	×		6		42		35						83	
	Total		6	6	37	42	.17	32			20	/E	83	83	_
A/Deaf	Uk			1										ĭ	
	Total		L	1									2	1	
T/Emotionally Disturbed	Uk	×				61		6.5						25.5	
	Total				8	19	9	6.9					14	25.5	
A/Emotionally Disturbed	Uk					9								9	
	Total				5	9							5	9	
T/EMR and TMR						18		1						19	
	Uk	×		m		239		8.2		-1				321	
	Total		67	3	2141/	257	/ī 19	42	278	1	36	/ E	/ī 5 2 9	340	0
O/Speech Correctionist	Uk	×		3		125		3						131	reg
	Total		3	3	217	125	3	3					133	131	on
I/Extreme Learning Problems	Uk	×				250								250	
	Total				257	250							257	250	
1/ Calculation incomplete due to missing data 2/ Calculation cannot be made due to missing 3/ Employment data mayallable	to missing due to mis le	g dat: ssing	a y data	<u> </u>								•	•	-	·
Uk-Unknown	ļ.						•								

Data Period 1968-1969

Special Education Personnel Estimated Requirements/Employment Comparison

State Name: Oregon

Esti-mated Employed Esti-d Employed Data Period 1968-1969 36 36 Total 2.5 Ŋ 37 Unspecified 12 ন 14 Esti-mated Employed Ungraded Special Education Personnel Estimated Requirements/Employment Comparison Esti-mated Employed mated Employed 17 Secondary Education Level 17 11 Elementary 20 7 Esti-mated Employed P.eschool 1/ Employment data unavailable
2/ Calculation cannot be made due to missing data
Uk-Unknown Degree Level Total Tota1 Total ď ď ď A-Aide O-Other I/Physically Handicapped State Name: Oregon Occupation Th/Occupations T-Teacher Th-Therapist Th/Physical

Oregon

Data Period1968 - 1969

Overview of Special Education Programs

									.—									P	enn	syi	νá	nia	r
																							,
_	3	Itineran																					•
Program	EIVE	Coopera Special																	_				
ł		Special Day	×															-					
Education		Special Schools	×																				
	lsii	Residen													•								•
_					٠																		
Ranges)	lary	Sr. H.	16-13																				•
Ievel (Age Ranges	Secondary	јг. н. S	13-15 1	13-15	•																		
Education I e	Elementary	Inter.	10-12	10-12																			the state
Edu	Eleme	Pri.	7-9	6-7															_				cable to
	,1	Handicap Category ±/	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Spaech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				If no entry is shown, category is not applicable to the state.
		ibnsH boO	H-1	H-2	H-3	H-4	H-5	H-6	L-H	8-14	6	H-10	H-11	H-12	H-13	H-14	H-15	91-H	H-17				л Л. Т



ecial Education Data Period1968 - 1969

Enrollments In Special Education

••	•							٠	٠				•	•		Pe	nns	syiv	/an:	ia				
	Waiting List								BLE	A.I.	ΑΛ	7 I.	NC											
ım Type	Itinerant				1124	339				3.70	598								32,392	923	27,606	241		
ition Progre	Coopera- tive Special																							
ecial Educa	Day Special		258	248				310	118				825	841	19,324	21,667	3,130	1,656					1,656	
Enrollments By Special Education Program Type	Special Schools	62	309	247			111	554	443			212	1061	848										
Enrollm	Residen- tial Class																							•
	Education . Level	Preschool	Elementary	Secondary	Elementary	Secondary	Preschool	Elementary	Secondary	Elementary	Secondary	Preschool	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	
	Handicap Category	Blind	^		Partially Sighted		Deaf			Hard of Hearing		Fmotionally Distirbed			EMB		TMR		Speech Handicaps		Speech and Hearing		Brain Injured	
d	Handica Code	H-1			H-2		H-4	<u> </u>		H-5	· :	H-7	· .		H-9	 	H-10		H-12		H-13		H=15	!

State Name: Pennsylvania

Pennsylvania

1969		Waiting List								ГE	aa.	ΙΑν	A 3	ON	,							
Data Period 1968-1969	m Type	Itinerant																				
Data Pe	Enrollments By Special Education Program Type	Coopera- tive	Special																			
	ecial Educa	Day	Special		1427	1963	5	700	523													
tion	ents By Spo	Special	SCHOOLS	104	522	417														•		•
ecial Educa	Enrollm	Residen- tial	CIGSS														,					
Enrollments In Special Education	_	Education Level		Preschool	Elementary	Secondary	Elementary	Elementary	Secondary													
State Name: Fennsylvania Enr		Handicap Category		Physically Handicapped			Aphasic	Educationally Retarded			,					<i>'</i> -	<i>-</i>	. 1				
State	đe	randica Code	I	H-16	_		H-19	H-21				,				 					_	



tinerant 1/7-1/18 1/7-1/18 1/7-1/18 1/7-1/18 1/7-1/18 1/30-1/E0 1/5-1/10 1/5-1/10 1/5-1/10 1/5-1/10 1/5-1/10 1/5-1/12 1/5-1/12 1/5-1/12 1/5-1/12 1/5-1/12 1/10-1/15 1/10-1/15 1/10-1/15 1/10-1/15 1/10-1/151/5-1/10 1/5-1/10 1/5-1/10 1/5-1/10 1/5-1/10 1/50-1/20 1/5-1/10 1/5-1/10 1/5-1/10 1/5-1/10 1/20-1/25 1/5-1/8 |1/5-1/25 |1/5-1/25 1/5-1/5 1/5-1/5 Coopera-tive Special Special Education Program Types 1/10-1/18 11/10-1/18 1/8-1/12 1/5-1/25 Schools | Special 8/1-5/1 1/5-1/8 Residen-Special Class Elementary Elementary All Grades All Grades All Grades All Grades Education All Grades All Grades All Grades All Grades All Grades Secondary Level Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher State Name: Pennsykvania Educationally Retarded Emotionally Disturbed Handleap Category H-12 Speech Handicaps Partially Sighted H-5 | Hard of Hearing H-15 Brain Injured Asphasic Blind Deaf H-9 EMR H-D TMR H-21 | L-H H-4 Handicap Code H-2 H-1

Pennsylvania

Data Period 1968-1969

Personnel/Pupil Contact Ratio

Special Education Personnel Estimated Requirements/Employment Comparison $^{
m J'}$ State Name: Pennsylvania

Data Period 1968-69

Employed . 14 30 3 107 46 12 74 104 165 248 22 7.1 63 Total 53-85 112-224 Esti-mated 57-73 Employed Esti-Unspecified Ungraded
 Preschool
 Elementary
 Secondary
 Ungr

 Esti-mated
 Esti-mated
 Enployed mated
 Enployed mated
 56 38 10 15 41 0 9 c 4 13 21 Education Level 15-23 49-99 13-17 42 99 10 بر 3 99 105 233 59 33 19 12 Ξ 17 67 38-62 57-113 44-56 3 6-12 Certified × × × × Degree Level None Total HREET None DOC Total None Total Uffeer None MA MA MA gk MA ď BA ₿À BA A=Aide O=Other Occupation T/Partially Sighted T/Hard of Hearing Th=Therapist T=Teacher T/Blind T/Deaf

Pennsylvania

 $\frac{1}{2}$ Based upon enrollment data only (no waiting list data available) $\frac{2}{2}$ Calculation incomplete due to missing data (estimated requirements are not calculated by degree level) $\frac{3}{2}$ Employment data unavailable

Uk-Unknown

ERIC

Special Education Personnel Estimated Requirements/Employment Comparison $^{1/}$ State Name: Pennsylvania

Data Period 1968-69

	Occupation		, ,				Educ	Education L	Level						
	T=Teacher A=Aide	Degree	111	Preschool	hool	Elementary	ntary	Secondary	dary	Ungr	Ungraded	Unspecified	cified	Total	11
	lst .	Level	reD	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed
	T/Hard of Hearing (cont.)	Total				14-24 ² /	370	24-40	2.4					38-642/	394
	T/Socially and Emotionally	REEH					9		1						7
	Disturbed	None	×				40		24						64
		ВА	×				140		93						233
		MA	×				36		24						0 o
		Uk	×				0		- 6						9
		Total		4/		7591-E0I	222	4/	148					103-165 ² /	370
	T/EMR	Heer					18		20						38
		None	×				253		226						479
1 -		BA	×				885		891						1776
190		MA	×				225		254						479
		Dr.	×				1		0						1
		Uk	×	i			22	,	23					76	45
		Total				/5	1404	866-1444	1414					866-1444	2818
	T/TMR	BSHH					8		5						13
		None	×				47		13						90
		ВА	×		İ		163		85						248
		MA	×				41		22						63
		Total				174-447	259	92-236	125					266-683	384
	T/Speech Correction	None		;		- i	63		0						63
		BA					220		9						977
	<u>ا ۱</u>	waiting	list	list data available	ilable)										
		missing	data	(estimat	ed require:	ments are	e not calc	ulated by	degree le	evel)					
	4/ Calculation cannot be made due to missing data Uk-Unknown	e to mis	burs)	data											•

Pennsylvania

Esti-mated Employed mated Employe Data Period 1968-69 Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded Esti-mated Employed mated Employed 0 0 0 10 0 103 99 19 17 Secondary Education Level 6-10 10 158 250 349 40 20 13 80 133 211 26 45 4 38 34 Elementary 215-359 165-331 Preschool Esti-mated Employed Certified × × × None Total Viffed Degree Level None None Total Total Total MA MA MA ď MA ă BA BA ď BA A=Aide O=Other I/Speech Correction (cont.) State Name: Pennsylvania I/Physically Handicapped T/Speech and Hearing Occupation 1/Brain Injured Th≈Therapist T=Teacher

254 14 20 13

F

40

80

165-331

199

5

57

9 10 359 162

221-369

Total

Based upon enrollment data only (no waiting list data available) Calculation cannot be made due to missing data Uk-Unknown <u>. – 1</u> 41

None

T/Educationally Retarded

Pennsylvania

26

194

160

46

2 34

Esti-mated Employed 20 306 20 73 236 Data Period 1968-69 Total 80-122 Esti-matea Employed Unspecified Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Esti-mated Employed 252 66 30 41 Secondary Education Level 12 34-52 Esti-mated Employed 54 40 13 137 Elementary 4 46-70 Based upon enrollment data only (no waiting list data available) Calculation cannot be made due to missing data Uk-Unknown Esti-mated Employed Preschool Certified Degree Level Total MA 늄 ă дķ T/Educationally Retarded (cont.) A=Aide O=Other State Name: Pennsylvania A/Physically Handicapped Occupation T≂Teacher Th=Therapist A'Brain Injured Tl/Physical जे की

Pennsylvania

Data Period 1968 - 1969

Overview of Special Education Programs

n Program	ee Jut I iu	Special Special Special Room Special Special Class Special S				X	×	×	× × ×	× × × ×	× × × ×	× × × × × ×	× × × × × ×	× × × × × × ×	× × × × × × × ×	× × × × ×	× × × × ×	× × × × × × × × × × × × × × × × × × ×		× × × × × × × × × × × × × × × × × × ×	× × × × × × × × × × × × × × × × × × ×	× × × × × × × × × × × × × × × × × × ×
Education	s	Special Special School School			×				×				××××	× × × ×	× × × ×	× × × ×	× × × ×					
Ranges)		Jr. H. Sr. H. Se			15-21			_	15-21	- 25	- w - - 	- w - - - 	15	- 2		- 2 - - - - - - - - - 			- <u>- - - - - - - - - </u>		- <u>2</u> - - - - - - - - - -	
Education Level (Age	Elementary	Pri. Inter. J			6-14				6-14 ·	6-14 · · · 6-14	6-14 6-14	-14 · · · -14	6-14 · · · 6-14 · · · · · · · · · · · · · · · · · · ·	6-14 · · · 6-14 · · · 10-13 · · · · · · · · · · · · · · · · · · ·	6-14 6-14 10-13 10-13 10-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14 6-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14 6-14 6-14	6-14 6-14 10-13 10-13 10-14 6-14 6-14 6-14
Educe		Pre- school			3-5 pvt			_	3-5	3-5 3-5 pvt	-5	-5 pvt	-5 pvt	3-5 pvt 3-5 3-5 3-5 under 5	3-5 pvt 3-5 pvt 3-5 3-5 3-5 3-5 pvt	3-5 pvt 3-5 3-5 under 5 3-5 pvt	3-5 pvt 3-5 3-5 a-5 3-5 a-5 pvt	3-5 pvt	3-5 pvt 3-5 pvt -5 pvt 3-5 pvt	3-5 pvt 3-5 pvt -5 pvt 3-5 pvt 3-5 pvt	3-5 pvt 3-5 under 5 3-5 pvt -5 pvt 3-5 pvt 3-5 ungraded	3-5 yvt 3-5 yvt 3-5 pv
	$rac{1}{ ext{Handican Catenory}} rac{1}{ ext{Landican}}$	1	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing		Hearing Handicapped	Hearing Handicapped Emotionally Handicapped		Hearing Handicapped Emotionally Handicapped Montally Retarded EMR	ing Han ionally	ing Han ionally rally Ret	ing Handicapped ionally Handicapped ally Retarded Custodial, Severe, Insti	ing Handicapped ionally Handicapped cally Retarded Custodial, Severe, Insti	ing Handicapped ionally Handicapped ally Retarded Custodial, Severe, Institch Handicaps ch Handicaps ch and Hearing ial Learning Disabilities	ing Handicapped ionally Handicapped cally Retarded Custodial, Severe, Insti ch Handicaps ch and Hearing ial Learning Disabilities Injured 2/	ing Handicapped lonally Handicapped cally Retarded Custodial, Severe, Instich Handicaps ch and Hearing ial Learning Disabilities Injured 2/ cally Handicapped	d	id Insti	Hearing Handicapped Emotionally Handicapped Montally Retarded EMR TMR WR (Gustodial, Severe, Institutional) Speech Handicaps Speech and Hearing Speech and Hearing Special Learning Disabilities Brain Injured 2/ Physically Handicapped Homebound 3/ Severe Emotionally Handicapped
	licap Je	Hano OOO	H-1 B	H-2 P	H-3 V	H-4 [H-5 F	H-6 F		H-7 E		H-7 H-8 Ā-9	н-8 		H-7 H-8 F-9 H-10 H-11	H-8 H-8 5-9 H-10 H-11 H-12 H-13	H-8 H-8 H-10 H-11 H-12 H-13 H-14	H-8 H-8 H-10 H-11 H-12 H-13 H-15	H-8 H-8 H-10 H-11 H-12 H-13 H-14 H-15 H-16	H-8 H-8 H-10 H-11 H-12 H-13 H-14 H-15 H-15 H-16	H-8 H-8 H-10 H-11 H-12 H-13 H-15 H-16 H-16 H-16	H-7 H-8 F-9 H-10 H-11 H-13 H-15 H-15 H-15 H-16 H-16



Rhode Island

State	State Name: Rhode Island F	Enrollments In Special Education	ecial Educa	tion		Data Pe	Data Period 1968 –1969	6961
dı			Enrollm	ents By Sp	ecial Educa	Emollments By Special Education Program Type	m Type	
SoibnaH Sode	Handicap Category	Education Level	Residen~ tial Special Class	Special Schools	Special Class in Regular Room	Resource Room	Itinerant	Waiting List
H-3	Visually Handicapped	Preschool			9			
		Elementary			15	7	6	
		Secondary			1		22	
9-H	Hearing Handicapped	Preschool		23	7		1	
		Elementary	ß	61	10	15	33	Έ
	,	Secondary		37		5	29	IAA
		Inspecified				39	35	ΠA
H-7	Emotionally Disturbed	Preschool		28				۷A
		Elementary			209	55		LO
6-H	EMR	Preschool			40			N.
		Elementary	18	125	696			
		Secondary	8		648			
		Ungraded			146			•
H-10	TMR	Preschool	Ţ	40				
		Elementary	2-8	27	161	·		
		Secondary	19	158	114			
		Ungraded		16	173			-
H-11		Preschool	1					
	(Institutionalized)	Elementary	95					
		Secondary	105					
H-12	Speech Handicaps	Unspecified					4759	
H-15	Brain Injured	Preschool			3			

Rhode Island

State	State Name: Rhode Island En	Enrollments In Special Education	scial Educal	tion		Data Pe	Data Period 1968 –	1969
d			Enrollm	ents By Spe	Enrollments By Special Education Program Type	tion Progra	m Type	
Handica Code	Handicap Category	Education . Level	Residential Special	Special Schools	Special Class in Regular	Resource	Itinerant	Waiting List
H-15	Brain Injured	Elementary	2500	49	334	45	22	
H-16	Physically Handicapped	Preschool		93*				
		Elementary		8	50			
		Secondary			1			
H-17	Home Bound	Unspecified					343	
.H-22	Severe and Emotionally	Elementary	*86					Ξ'
	Handicapped	Secondary	34*					IAA
								JIA
-	7							VA
			 					IO.
								Ŋ
				•				
							•	
				•				
*Prive	*Private School			•				

TANK THE PROPERTY OF

_																		R	hoc	le I	sla	nd	,	
69		[tinerant	1/8	1/8		1/200	1/200	1/200	1/25	1/25	1/10	1/8	1/8	1/10	1/8	1/8			_					
1968 –196	im Types	Resource Itinerant Room	1/10	1/10	1/10						1/10	1/15	1/15	1/10	1/15	1/15		1/10						
Data Period 1968 -1969	Special Education Program Types	Special Class in Regular School	1/10	1/10	1/10													1/10		1/10	1/10	1/14	1/16	1/10
Ã	al Educat	Special Schools									1/10	1/10	1/10	1/10	1/10	1/10	1/10		1/10	1/10	1/10	1/14	1/16	1/10
	Speci	Kesidential Special Class									1/10	1/10	1/10	1/10	1/10	1/10				1/10	1/10	1/14	1/16	1/10
ıct Ratio		Education Level	Preschool	Elementary	Preschool	Preschool	Elementary	Secondary	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Secondary	Preschool	Elementary	Preschool	Preschool	Primary	Intermediate	Secondary	Preschool
Personnel/Pupil Contact Ratio		Occupation	Teacher		Aide	Consulting Specialist			Peripatologist		Teacher			Speech and Hearing	Therapist		Teacher		Alde	Teacher				Aide
State Name: Rhode Island		Handicap Category	Visually Handicapped								Hearing Handicapped						Emotionally Disturbed			EMR .				•
St	dŧ	Handlos Sode	H-3			-					9-H						2-Н			6-H				

Rhode Island Resource Itinerant 1/70 1/70 1/70 Data Period 1968 -1969 Special Education Program Types 1/10 1/10 Special Class in R Regular School 1/10 1/10 1/10 1/10 1/12 Special Schools 1/400 1/10 1/10 1/10 1/10 1/10 1/10 1/40 1/10 1/10 1/12 Residen tial Special Class 1/10 1/12 1/10 1/10 1/10 1/12 * 1/12 Unspecified Unspecified Elementary Elementary Elementary Elementary Elementary Education Elementary Elementary Secondar Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Preschool Preschool Preschool Preschool Personnel/Pupil Contact Ratio Phys. Ed. Consultant Teacher/Physically Child Development Speech & Hearing Occupation Speech Therapist Handicapped Therapist Teacher Teacher Teacher Teacher Aide Aide * Ratio is based on teacher with aide H-16 Physically Handicapped State Name: Rhode Island Handicap Category Institutionalized) (Custodial, Severe, H-11 | Mentally Retarded H-12 Speech Handicaps **Brain Injured** 4-10 TMR H-15 Handicap Code

A STATE OF

Rhode Island Resource Itinerant Data Period 1968 -1969 Special Education Program Types Special Class in R Regular School 1/10 1/10 1/10 1/10 Special Schools Residential Special Education Level Elementary Elementary Secondary Secondary Personnel/Pupil Contact Ratio Occupation Teacher Aide H-16 Physically Handicapped State Name: Rhode Island Handicap Category (cont.) Handicap Code

Employed Data Period 1968-1969 **5**8 6 46 217 103 13 22 22 41 24 24 Total 22 3/ 193 3/ <u>√2</u> 06 52 3/ Esti-mated 5 Employed 46 20 46 Ξ Unspecified Esti-mated 89 Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded Esti-mated Esti-mated Employed का 142 Secondary Education Level 8 3⁄ 72.3/ ને જ Uk-Unknown Employed 37 56 53 54 m 22 Ξ Elementary 12 3/ 12 3/ 43 3/ 113 3/ Esti-mated 56 1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable Esti-mated Employed 24 24 21 Preschool 2 3/ 8 3/ 2 3/ 9 3/ નો Certified × × × × × × × Degree Level Total Total Total Total Total Total Total MA MA MA MA MA MA Ωķ Uk ğ BA BA A-Aide O-Other T/Physically Handicapped State Name: Rhode Island T/Visually Handicapped T/Emotionally Disturbed A/Visually Handicapped Th/Speech and Hearing T/Hearing Handicapped O'Consultant Visually Handicapped T/Mentally Retarded Occupation O/Peripatologist Th-Therapist T-Teacher

Rhode Island

1-199

Rhode Island Esti-mated Employed Data Period 1968-1969 Total 18 Employed Unspecified Esti-mated Esti-mated Employed mated Employed Special Education Personnel Estimated Requirements/Employment Comparison Ungraded Secondary Education Level Elementary Esti-mated Employed 10 ß Esti-mated Employed Preschool œ Certified Degree Level 古古古 A-Aide O-Other State Name: Rhode Island A/Physically Handicapped A/Emotionally Disturbed A/Mentally Retarded Occupation T-Teacher Th-Therapist Uk-Unknown

ERIC Full Text Provided by ERIC

Data Period 1968-69

State Name: South Carolina ')verview of Special Education Programs

		, —,													out	:h (arc	lin	a		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
												İ										
·	Itinerant											-	×									
Program	Кезоитсе Коот	X													į	-						
1 1	Self- Contained Sasi		X		×	×		×			×	×			×			×				
Education	School Special Day	X			×			×			×	×										
	Residential	X			×	•		×			,				×						ļ }	
8)	Sr.•	16-18	16-18		16-18	16-18		16-18		16-18	16-18		16-18		16-18		16-18					
Range	High Tigh	13-15	13-15		13-15	13-15		13-15		13-15	13-15	-	13-15		13-15		13-15				•	
Education Level (Age Ranges)	Inter- mediate	9-12	9-12		9-12	9-12		9-12		9-12	9-12		9-12		9-12		9-12				ate	
ation Le	Primary	8-9	8-9	·	8-9	8-9		8-9		8-9	8-9		8-9		8-9		8-9			 	the state	
Educ	Preschoct	1-5	1-5		1-5	1-5		1-5		1-5	1-5		1-5		1-5		1-5				applicable to the	
	•											na1)										
	Handicap Category 1/		' Sighted	Handicapped		Hearing	Hearing Handicapped	ılly	Montally Retarded			todial, Severe, Institutional)	Spaech Handicaps	Speech and Hearing	Special Learning Disabilities	ured	Physically Handicapped $^{2\prime}$	put			If no entry is shown, category is not Called Orthopedically Handicapped	
	Hanc	Blind	Partially	Visually	Deaf	Hard of Hearing	Hearing	Emotionally	Mentelly	EMR	TMR	MR (Custodial	Speech F	Speech a	Special I	Brain Injured	Physical	Homebound			If no entry Called Ortl	İ
	desibneH eboO	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	H-9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17			7/2	

			\vdash					_				_	_	_	•	200	A		. 011	1110			_	
69-		Waiting List							ÐΊ	de.	i6v	Αĵ	N									•		
Data Period 1968–69	m Type	Itinerant																8040	5360					
Data Pe	tion Progra	Resource Room	3	4																				
	Enrollments By Special Education Program Type	Seif- Contained Room Class			7	30			110	300	40		8925	2480		500	140			102	89	105	100	
ıtion	ents By Spe	Day Special School	3	4		40				10		30			50						•		•	
ecial Educa	Enrollm	Resi- dential	62	105			193	. 117		30	10									15	2			ı
Enrollments In Special Education		Education . Level	Elementary	Secondary	Elementary	Preschool	Elementary	Secondary	Elementary	Elementary	Secondary	Preschcol	Elementary	Secondary	Preschool	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	
Name: South Carolina		Handicap Category	Blind		Partially Sighted	Deaf			Hard of Hearing	Emotionally Handicapped		EMR			TMR			Speech Handicaps		Special Learning Disabilities		Orthopedically Handicapped		
State	clı	solbnaH Gode	H-1		H-2	H-4			H-5	H-7		6-H			01-H	<u>.</u>		H-12		H-14		H-16		

South Carolina Data Period 1968-69 Special Education Program Types Programs Itinerant 1/75 1/8 Education Level All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher I-16 Orthopedically Handicapped Teacher Emotionally Handicapped State Name: South Carolina Handicap Category [-12] Speech Handicaps Partially Sighted -5 | Hard of Hearing Blind -4 Deaf (-10 TMR Handicap Code 1-2 -7 I

Employed 200 550 25 30 58 817 10 20 114 90 23 63 64 28 67 64 34 Data Period 1968-69 Total 482/ Esti-mated 19 85 178 61 Esti-mated Employed Unspecified Esti-mated Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Employed 110 6 24 12 80 217 20 15 24 2 10 27 27 Secondary Education Level જા 9 11 14 7 17 Employed 16 440 009 18 22 120 40 40 34 54 Φ 34 75 Elementary 14 94 24 87 Esti-mated œ 38 42 62 107 Esti-mated Employed 9 24 24 Preschool σ Certified >4 Degree Level Uncer Uncer Uncer Total Uncer Total Total Total Total Total MA BA MA MA MA BA M M A-Aide O-Other State Name: South Carolina T/Emotionally Handicapped T/Visually Handicapped I/Hearing Handicapped I/Speech Handicapped Th-Therapist T-Teacher T/TMR T/EMR

South Carolina

Based upon enrollment data only (no waiting list data available) Calculations incomplete due to missing data

Calculations cannot be made due to missing data Employment data unavailable

IJ엘엘争

ERIC Full Text Provided by ERIC

Esti-mated Employed Data Period 1968-69 Total Esti-mated Employed Esti-mated Employed Unspecified Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Employed Secondary Education Level 10 Employed 23 17 긔 Elementary Preschool Eleme Esti-mated Employed Esti-હ્ય 15 Based upon enrollment data only (no waiting list data available) Calculations incomplote due to missing data Certified Degree Level Uncer. Uncer. Total Total BA T/Special Learning Disabilities T/Orthopedically Handicapped State Name: South Carolina A-Aide O-Other Occupation Th-Therapist T-Teacher

South Carolina

Data Period 1968-1969

State Name: South Dakota Overview of Special Education Programs

	<u>. </u>																Sou	th.	Da	kot	a_	
ے						.															_	
Program	Itinerant	×			×			×		×			×				×					
i	Class Decial							×		×	×											
Education	Special School										×											.,
	Residential School	×	×		×	×		×			×				×		×					
(i)				,																		·
Ranges)																						•
(Age	Ungraded				_			-18			21		21		-		21					tate
Level								12			5-21		7-21				7-21					the s
Education	Secondary	14-17	14-17		14-17	14-17	•	14-21		14-21	14-21											ble to
Educ	Elementary	6-13	6-13		6-13	6-13		7-13		7-13	7-13				7-13							applicable to the state
	·											itutional)										١ ٠,
												Institut			ities							Age Breakdowns are approximations If no entry is shown, category is no
	gory 1/			ped			ed							g	isabil		pbed					are ap own, o
	Handicap Category		Sighted	Handicapped		ing	dicapp		arded			l, Sev	icaps	leari n	ning D		andica					lowns is sh
	ndica					[Hear	g Hand	nally	ly Ret			stodia	Hand	and F	l Leari	njured	ally H	punc				Breakd entry
	На	Blind	Partially	Visually	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally	Mentally Retarded	EMR	TMR	MR (Gustodial, Severe,	Speech Handicaps	Speech and Hearing	Special Learning Disabilitie	Brain Injured	Physically Handicapped	Hemebound				Age 1
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	H-8	н-9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17		 -		



		*	1	<u> </u>		<u>.</u>			<u> </u>	ļ					,		So	ıth	Da'	kot	a 				
-1969		Waiting _* List	14		14				27	28	112	168		210	252		84	14		210	280	280	14	28	
Data Period 1968-1969	im Type																								
Data Pe	tion Progra	Itinerant	0	1			1						14			23				1800					82
	Enrollments By Special Education Program Type	Day Special Class									8			580	290		120	51							
tion	ents By Spe	Special School															34	11							
cial Educal	Enrollm	Residen- tial School	7	3	27	13	47	. 19	46	19			45				9	99	220	٠	34	0	100	31	
Enrollments In Special Education		Education · Level	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Ungraded	Elementary	Secondary	Ungraded	Elementary	Secondary	Ungraded	Ungraded	Elementary	Secondary	Elementary	Secondary	Ungraded
State Name: South Dakota Enro		Handicap Category	Blind		Partially Sighted		Deaf		Hard of Hearing		Emotionally Disturbed			EMR			TMR			Speech Handicaps	Special Learning Disabilities		Physically Handicapped		
State	d	Handica Code	H-1		H-2		H-4		H-5		L-H			6-H			H40			H-12	H-14		9FH		



										•								Sou	th 1	Dak	ota		•		
69		•										,						eload							
1 1968- 1969	am Types	Itinerant	1/5 day		1/5 day			1/5 day	1/5 day	1/5 day		/						1/100 caseload		_	1/5 day	1/5 day			
Data Period	Education Program	Day Special School					1/8		$1/5-12^{\frac{1}{2}}$	$1/5-12^{\frac{1}{2}}$	1/12-20	$1/12-20^{2}$	$1/5-10^{2}$	$1/5-10^{2}$	1/10-15	1/10-1					Probably	Ungraded			
Q		Special School											1/5-10	1/5-10	1/10-15	1/10-15									
	Special	Residential School		None		None		None			}		1/5-10	1/5-10	1/10-15	1/10-15	None		$1/5-10^{3/2}$	1/10-20	$1/5-12^{\frac{1}{L}}$	$1/5-12^{\frac{1}{2}}$	1/12-20	1/12-20	
act Ratio		Education Level	Secondary	All Grades	Elementary	All Grades	Elementary	All Grades	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	All Grades	All Grades	Elementary	Elementary	Elementary	Secondary	Elementary	Secondary	1/10-20 with aide
Personnel/Pupil Contact Ratio																									$\frac{3}{1}/10-2$
Personne		Occupation	Teacher	Teacher	Teacher	Teacher	Teacher		Teacher		Aide		Teacher		Nide		Teacher	Therapist	Teacher	Aide	Teacher		Aide		-15 with aide
State Name: South Dakota		Handicap Category	Blind	H-3 Visually Handicapped	H-4 Deaf	H-6 Hearing Handicapped	H-7 Emotionally Disturbed		H-9EMR				H-10TMR					Speech Handicaps	Special Learning Disabilities		H-16 Physically Handicapped				$1/12-20$ with aide $\frac{2}{1/10-15}$
St	₫€	Solbrie H Sode	H-1	H-3	H-4	9-H	H-7		H-9			1-2						H-12	H-14		H-16				$\frac{1}{1}$

ERIC Full Text Provided by ERIC

Personnel/Pupil Contact Ratio State Name: South Dakota 1-209 303

St	State Name: South Dakota	Personnel/Pupil Contact Ratio	tact Ratio		Ã	ata Perio	Data Period 1968-1969	6
١ .		4		Speci	al Educat	ion Progr	Special Education Program Types	
Solbrie H Sode	Handicap Category	Occupation	Education Level	Residen- tial School	Special School	Day Special School	Itinerant	
I-9	EMR	Tutors	All Grades				1/1	
I-7	Emotionally Disturbed	Tutors	All Grades				1/1	
-16	Physically Handicapped	Tutors	All Grades				1/1	
		Therapist/Physical	All Grades				1/100 case loa	se loa
H-9	EMR	Voc Adjust Coord	Secondary				1/50 case load	e load
					•			
	-							
								,
	-							
	•							
	,							
						-		

South Dakota

Esti-mated Employed 19 12 13 16 44 83 6 33 17 Data Period 1968-69 Total 26-53 3/ 76-178 7 Esti-mated Employed Unspecified Esti-mated Employed 4 20 œ Special Education Personnel Estimated Requirements/Employment Comparison \mathbb{L}' Ξ 12 10 Ungraded બો ع زي 2 Esti-mated Employed 12 23 ~ Secondary Education Level श्च 24-58 12-25 Employed 19 Elementary 32 69 12 14 Esti-mated 48-116 14-28 Esti-mated Emplcyed Preschool Deitified Degree Level None None None None High None Total Total Total HRES Total Total MA MA MA BA BA BA BA BA A=Aide O=Other State Name: South Dakota T/Visually Handicapped T/Emotionally Disturbed T/Hearing Handicapped Occupation Th=Therapist T=Teacher T/EMR T/TMR

Based upon enrollment data only (no waiting list data available) $\frac{2}{A}$ Calculations cannot be made due to missing data

South Dakota

Calculations cannot be made due to missing data Calculations incomplete due to missing data

Employment data unavailable

Employed 79 20 97 œ 16 Ξ 17 1 Data Period 1968 -- 69 Total 27-42 Esti-mated र्ज के 1-3 14 3-6 23 82 18 Employed Unspecified Esti-mated Employed 62 20 œ 92 · 16 17 Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded ો Esti-mated 14 82 91 23 18 Esti-mated Employed Secondary Education Level બો 3-6 Employed Elementary Esti-mated 8-20 3-6 1/ Based upon errollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable 1-3 Employed Preschool Esti-mared Certified Total Total Degree Total Level Total Total Total MA M ğ MA MA ďķ BA BA BA BA O/Physically Handicapped Tutors Uk BA 젊 Vspecial Learning Disabilities O/Emotionally Disturbed Tutors T/Special Learning Disabilities O/EMR Vocational Adjustment A=Aide O=Other O/Psychological Examiners State Name: South Dakota T/Physically Handicapped Coordinator Occupation Th/Occupational O/Psychologist O/EMR Tutors Th=Therapist Th/Physical I=Teacher Th/Speech

						_				·				,,			,	Te	nn	ess	ee	
				·																		
ram						·												_				
Program																						,
Education																						
Educ	Itinerant						,						×								·	
	Day Special Class	X	×	·	×	×		×		×	×		×	i	×				×			
es)								•			•											·.
e Rang																		•				,
Level (Age Ranges)						٠	•															ate
Education Le	Ungraded	5-21	5-21	·	5-21	5-21	•	5-21		5-21	5-21		5-21		5-21	. •						to the st
Edu	Preschool				3-6																	licable
		٠										stitutional)			5				·			y is not applicable to the state
	Handicap Category $^{ extstyle J}$		Partially Sighted	Visually Handicapped		Hard of Hearing	Hearing Handicapped	nally	Mentally Retarded			MR (Gustodial, Severe, Insti	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	puno	Multiple Handicapped			If no entry is shown, category Perceptually Handicapped
	Ä	Blind	Partia	Visual	Deaf	Hard c	Hearin	Emotionally	Menta	EMR	TMR	MR (C:		Speec	Specia	Brain 1	Physic	Homebound		•		If no en! Perceptu
	Handicap Gode	H-1	H-2	H-3	H-4	H-5	9-H	H-7	8-H	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-18			77



															· 		 	 Те	nne	ess	еe	
69		Waiting List							,	0	íde	lie:	νA :	οИ								
Data Period 1968-69	n Type									•												
Data Per	lon Prograr							•														
	ial Educat																					
ion	Enrollments By Special Education Program Type	Itinerant						16026										•		•		•
cial Educat	Enrollme	Day Special Class	266	301	108	11342	1842	62	692	910												
Enrollments In Special Education		Education . Level	Ungraded	Ungraded	Ungraded	Ungraded	Ungraded	Ungraded	Ungraded	Ungraded												
Tennessee		Handicap Category	Visually Handicapped	Hearing Handicapped	Emotionally Disturbed	EMR	TMR	Speech Handicaps	Special Learning Disabilities	Multiple Handicapped												
State Name:	ď	Handica Code	H-3	9-H	H-7	H-9	H-10	H-12	H-14	H-18											_	

Liberate et

<u>Tennessee</u> Data Period 1968-69 Special Education Program Types Itinerant 1/70 Special Class 1/10 1/10 1/10 1/25 1/10 1/8 1/8 1/8 Day Education Level Ungraded Ungraded Ungraded Ungraded Ungraded **Ingraded** Ungraded Ungraded Ungraded Ungraded Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher **Emotionally Disturbed** H-18 Multiple Handicapped Handicap Category State Name: Tennessee Speech Handicaps Partially Sighted Special Learning Hard of Hearing Disabilities Blind Deaf TMR EMR Handicap Code 1-10 H-4 I-2 6-E 1-12 H-5 [-7 H-14 H-1

Esti-mated Employe 400 750 22 18 350 130 177 180 63 58 77 Data Period 1968-69 Total 27-33 30-38 1134 230 230 114 18 69 Esti-mated Employed mated Employed Unspecified œ 18 400 350 750 130 180 22 22 177 19 58 77 Special Education Personnel Estimated Requirements/Employment Comparison $^{1\!\!1}/$ 63 Ungraded 30-38 27-33 230 18 1134 230 114 69 Esti-mated Employed mated Employed mated Employed Secondary Education Level Elementary Preschool Degree Level Uncer Uncer Uncer Uncer Uncer Total Total Total Total Total MA MA ď Uk Çķ ğ ğ BA BA T/Special Learning Disabilities A=Aide O=Other State Name: Tennessee T/Multiple Handicapped T/Visually Handicapped I/Emotionally Disturbed T/Hearing Handicapped Th/Speech and Hearing Occupation Th=Therapist T=Teacher T/EMR

Tennessee

Ī

UK - Unknown

Data Period 1969-1970

Overview of Special Education Programs

State Name: Texas

																		Te	xas	3			
	Itinerant	×	×											×			×	×	×				
E	уоош уевотсе	×	×													×			,		-	•	
Program	Cooperative Class	×	×					×								×						•	
Education	Special Day Class	×	×		×			×		×	×					×	×			Х			
Educ	Special School				×									·									
	Residential	X			X			X		Х	×						×						
(Si																							
Je Ranges	DefitedanU									6-21	6-21							6-21	6-21	6-21			
Education Level (Age	Secondary	13-21	13-21		13-21			13-21						13-21		13-21	13-21		_			tate	
cation I	Ejementary	6-12	6-12		6-12		•	6-12						6-12		6-12	6-12					to the s	
Edu	Preschool				3-5																	olicable.	
	Handicap Category $1/$	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Mentally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Hospital	Combination		If no entry is shown, category is not applicable to the state	
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	L-H	H-8	6-H	H-10	H-11	H-12	H-13	H-14	H-15	H~16	H-17	H-18	H-19		7.	

Date Period 69 - 70

Enrollments In Special Education

- н			Enrollments	nts By Spec	ial Educati	By Special Education Program Type	Type		
andicap Code	Handicap Category	Education Level	Residen- tial School	Special School	Day Special Class	Itinerant	nwor	Estimate Unserved Pop. based on preva- lence rates	Waiting d List s
H1	Blind	All Grades	250				141	250	85
H-2	Partially: Sighted	All Grades		,			87	4,920	
H-4	Deat & Severely Hard of Hearing	Preschool	152		396				Data
		All Grades	503	864	359			1,600	for
H-7	Emotionally Disturbed	All Grades	409		220			51,650	5
H-9	EMR	All Grades	787		38206			23,400	Other
H-10	H-10 TMR	_All Grades	762	·	4705			4,750	Than
H-13	H-13 Speech and Hearing	All Grades				83,882		64,500	Texas
H-15	H-15 'Minimal Brain Injured	All Grades	•		7,860			48,700	School
H-16	H-16 Physically Handicapped	All Grades			1,010			23,250	for the
H-17	Homebound	All Grades				1,487			Blind
H-18	Hospital	All Grades				557			is
Н-19	H-19 Combination	All Grades			907				ınavailable
-									
		·							
									exc
									~
<u> </u>			-						
_				•					

Texas

State Name: Texas

Texas Special Education Program Types Itinerant 1/60 Day Special Class 1/8 1/8 1/8 1/8 1/8 1/6 1/2 Residen-Special tial School 1/8 1/8 <u>/</u>8 1/6 1/9 1/9 1/2 All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Preschool Education Level Occupation Therapist Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Physically Handicapped Emotionally Disturbed Handicap Category Speech and Hearing Partially Sighted State Name: Texas Brain Injured Blind Deaf EMR TMR 97H Handloap Code H-2 H-4 6-H H-10 H-13 H-15 H-1 H-7

Data Period 1,359 -1970

Personnel/Pupil Contact Ratio

Texas Esti-mated Employed Data Period 1959-1970 988 3349 785 44 魯 91 Total 8 5364 1398 Employed 188 886 44 5364 3349 785 畠 Unspecified ᅧ 153 208 बुल 66 1398 Fsti-rated Emrloyed Special Education Personnel Estimated Requirements/Employment Comparison 1/ Ungraded 12 Fsti-mated Employed mated 27 Secondary Education Level 2 Uk - Unknown Esti-mated Employed Elementary 11 24 7 1/Based upon enrollment data only (no waiting list data available) Esti-mated Employed 20 Preschool 2/ Calculation cannot be made due to missing data Degree Level ğ K K 出出出 ă ğ άķ ä Uk 3/ Employment data incomplete A=Aide O=Other T/Physically Handicapped T/Combined Handicapped T/Emotionally Disturbed T/Regular Handicapped State Name: Texas Occupation T/Mentally Retarded T/Partially Sighted T/Requiar Hospital T=Teacher Th=Therapist I/Brain Injured Th/Spaech T/Blind T/Deaf

る機関係

The state of

					,						·									Uta	h	, 	
		School Regular Class in			×							×											
		Itinerant	×	×			×								×			×	×				•
Program	θΛ	Cooperati Special Class														×			_		-		
ation		Day Special Class							×		×												
Education		Special Special						•					×										.5
	Is	Residenti Special Class	X		М				X					'	i								,
(S)	dary	High	15-22	15-22		15-22	15-22		15-22		15-22	15-22	15-22		15-22	15-22	15-22	15-22	15-22				
e Range	Secondary	Hīdy]I.•	12-14	12-14		12-14	12-14		12-14		12-14	12-14	12-14		12-14	12-14	12-14	12-14	12-14				
evel (Ag	ntary	Inter- mediate	9-11	9-11		9-11	9-11	,	9-11		9-11	9-11	9-11		9-11	9-11	9-11	9-11	9-11				state
Education Level (Age Ranges)	Elementary	Primary	8-9	8-9		8-9	8-9	•	8-9		8-9	8-9	8-9		8-9	8-9	8-9	8-9	8-9				to the si
Edu		Leschool				3-5													•				applicable to the
		Handicap Category 1/	Blind	Partially Sighted	Visually Handicapped	Deaf .	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	IMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities $2/$	Brain Injured	Physically Handicapped $3/$	Homebound				If no entry is shown, category is not app Remedial Program Motor Handicaps
	ф	Handto	H-1	H-2	H-3	H-4	H-5	9-H	H-7	8-E	<u>н</u> -9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17	_			नोलोली

Class in Regular School 118 44 58 165 12 Special Itinerant Enrollments By Special Education Program Type 176 7767 703 13 91 27 63 41 Coopera-Special Class 6547 2734 Day Special Class 726 1505 1433 604 Special Schools 518 Residen-Special Class 18 70 38 ω 69 43 21 27 tial Education Elementary Elementary Elementary Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Secondary Secondary Secondary Secondary Preschool Preschool Secondary Preschool Ungraded . Level No waiting list data available Special Learning Disabilities Handicap Category **Emotionally Disturbed** MR (Institutionalized) Speech and Hearing Partially Sighted Hard of Hearing Deaf EMR IMR H-13 H-10 H-14 Handicap Code H-11 H-7 H-2 H-5 6-H H-4

Utah

-

1

-

Data Period 1968-69

Enrollments In Special Education

State Name: Utah

Utah Class in Regular School Special 06 Data Period 1968_69 Itinerant Enrollments By Special Education Program Type 273 Cooperative Special Class Day Special Class Special Schools Enrollments In Special Education Residen-tial Special Class Education · Level Elementary Elementary Secondary No waiting Jist data available Handicap Category Physically Handicapped State Name: Utah Homebound Handicap Code H-16 H-17

Data Period 1968-69 Coopera-tive Special Class Special Education Program Types 1/15 1/15 1/15 Day Special Class 1/10 1/15 1/10 1/18 Special Schools Special 1/6 Class Education Level Elementary Elementary Elementary Elemen tary Elementary All Grades Elementary Elementary Elementary Secondary Secondary econdary Secondary Secondary Secondary Secondary Secondary Ungraded Ungraded Psrsonnel/Pupil Contact Ratio Occupation Correctionist Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Severe Mentally Retarded **Emotionally Handicapped** Handicap Category Speech and Hearing Partially Sighted Hard of Hearing State Name: Utah Blind Deaf EMR TMR H-13 Handicap Code H-1:0 H-11

Utah

1/12

Elementary

Remedial Teacher

Special Learn. Disability

Physically Handicapped

91**-**E H-14

Teacher

Teacher

With teachers

With 3 aides

Homebound

I-17

Secondary All Grades

1/65 1/65

1/12 1/12

ERIC
Full Rext Provided by ERIC

Special Classes in Regu-

tinerant

lar School

1/8

1/15

6**-**H

1-H

H-2

I

7

1-3

State Name: Utah	Spect	al Ed	ucation I	ersonnel	Estimate	d Requiren	nents/En	Special Education Personnel Estimated Requirements/Employment Comparison $^{ar{J}'}$	Compari	oo T		Data P	Data Per ⁴ od 1968–69	8-69
Occupation		pə				Educe	Education	Level						
T-Teacher A-Aide	Degree	1314.	Preschool	loot	Elementary	ntary	Secondary	Idary	Ungraded	aded	Unspecified	ified	Total	al
Th-Therapist O-Other	Level	Cer	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Етріоуес
T/Visually Handicapped	BA	×	,			6		4				2		15
	MA	×		1		1		1		1		1		5
	Total		/7	1	53/	10	43/	5	77	1	2/	3	9 <u>3</u> /	58
T/Deaf	Uncer.			5		ເວ		2						12
	BA	×		2		14		8						24
	MA	X		3		7		6		2		2		23
	Total		77	10	73/	26	$\sqrt{2}$ 3/	19	77	2	77	2	/ <u>F</u> 6	58
T/Hard of Hearing	BA	X				2								2
•	MA	×				1		1		1				ဗ
	Total				11	က	4	1	/7	1			15	5
T/Emotionally Disturbed	None	X				1				1				2
	BA	×				19		11		1				31
	MA	×				5		2		1				6
	Total		2	4/	72	26	60	13		3			134	42
T/EMR	None	×				4		1		1				9
	ВА	×				99		65		26		1		158
	MA	×		2		8		11		3				24
	DR	×				1		1						2
	Total		77	2.	100	- 62	95	78		30	2/	1	195	190
 Based upon enrollment data only (no waiting list data available) Calculations cannot be made due to missing data Calculations incomplete due to missing data Employment data not available 	ily (no widue to missing	aiting Issing g dat	list data J data B	a availabl										

ERIC Full Text Provided by ERIC

Employed 79 102 241 314 16 19 42 21 45 61 Data Period 1968-69 Total 382 25 27 S 129 12 Employed Esti-18 85 က 65 18 21 Unspecified Uk - Unknown 7 77 7 55 13 92 Special Education Personnel Estimated Requirements/Employment Comparison $^{
m J}$ Ungraded Esti-mated 7 /7 7 77 7 ন 25 Esti-mated Employed 102 83 17 14 14 Secondary Education Level ો 10 10 113 Employed 15 130 11 23 ß 12 ო 104 Elementary Esti-mated 13 æ 119 13 272 27 Based upon enrollment data only (no waiting list data available) Esti-mated Employed Preschool Calculations cannot be made due to missing data Calculations incomplete due to missing lata Employment data unavailable ો Certified Degree Level None None Total Total Total Total Total MA MA MA MA DR BA ğ BA A Æ Ηď A-Aide O-Other T/Severe MR (with 3 aides) L/Physically Handicapped T/Remedial Teachers for Learning Disabilities C/Speech and Hearing Correctionist T/Home and Hospital Occupation State Name: Utah Th-Therapist T-Teacher A/Blind T/TMR 늬∽J에 의 4J

Utah

ERIC

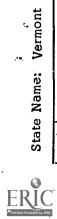
Full Text Provided by ERIC

	· .																۷e	rmo	nt	· ,		
E	Itinerant	×	×										×		×		×					
Program	Kesource														×							
ł .	Day Special							X		X	X				×				Х			
Education	Special														X							
	Residential	,			X	X		×		Х					×		×		×			
s)																						
je Ranges	Ungraded							5-21			5-21							,	5-21		•	
Level (Age	Secondary		13-20		13-20			13-20		13-20			13-20		13-20		13-20					
Education]	Elementary	6-12	6-12		6-12			6-12		6-12			6-12		6-12		6-12				to state	
Edu	Preschool	4-5	4-5		3-5	3-5				,			4-5		4-5		4-5					
	Handicap Category 1/	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Mentally Retarded	EMR	TMR	MR(Custodial, Severe, Institutional)	Speech Handicaps	Speech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound	Blind/Deaf Mentally Retarded		If no entry is shown, category is not applicable	
	Handicap Code	н-1	Н-2	H-3	H-4	H5	9-H	2-H	8-H	6-H	01-H	H-11	H-12	H-13	H-14	H-15	H-16	H-17	H-18		1/1	

Date Period 1968-69

Enrollments In Special Education

. de			Enrollme	nts By Spec	Enrollments By Special Education Program Type	on Program	Type	
solbneH eboO	Handicap Category	Education Level	Residen- tial	Special	Day Special	Resource	Itinerant	Waiting List
H-1	Blind	Elementary					6	
H-2	Partially Sighted	Preschool					2	
		Elementary	,				81	
		Secondary					45	
H-4	Deaf	Preschool	- 17					
,		Elementary	37					
		Secondary	97					
H-5	Hard of Hearing	Preschool	4					
H-7	Emotionally Disturbed	Elementary	35 .		13			
		Secondary	146					
	•	Ungraded	30					
6 - H	EMR	Elementary	50		449			32 *
		Secondary	34		354		•	
H-10	TMR	Elementary	42		131			16 *
		Secondary			11			
H-11	MR (Custodial, Severe, Institution)	Elementary						48 *
H-12	Speech Handicaps	Elementary					598	
H-14	Special Learning Disabilities	Preschool	20	3.8				
		Elementary	29	10	69	84	172	
H-16	Physically Handicapped	Preschool	12					
		Elementary	9				62	
		Secondary	. 2					
* Pro	* Provided by Brandon School only (other	(other waiting list data is not tabulated in Vermont)	ata is not ta	sbulated in	Vermont)		-	



Date Period 1958-69

Enrollments In Special Education

Waiting List Resource Itine. Enrollments By Special Education Program Type Day Special 4 Special Residen-tial Education Level Ungraded Ungraded Blind - Mentally Retarded Deaf - Mentally Retarded Handicap Category H-18 Code Hendicep

Vermont



State Name: Vermont

1		. بد					·				1	,	ī		,		- 1	ī	۷e	rmo	ont,				
		Itinerani	1/1	1/10	1/10																				
Data Period 1968-69	Special Education Program Types	Resource Itinerant															:								
ata Perio	ion Prog	Day Special			'							1/8							1/15	1/15	1/15	1/10	1/10	1/12	
D	ial Educat	Special															estimate								
	Speci	Residen- tial				1/5	1/5	1/5	1/10	1/10	1/8	1/7	1/8	1/6	1/6	1/6	1/10 es	*	1/15						
act Ratio		Education Level	Elementary	Elementary	Secondary	Preschool	Elementary	Secondary	Secondary	Ungraded	Preschool	Elementary	Secondary	All Grades	Ungraded	Ungraded	All Grades	All Grades	Elementary	Secondary	Elementary	Elementary	Secondary	Elementary	:
Personnel/Pupil Contact Ratio		Occupation	Tutor	Counselcr		Teacher/Academic			Teacher/Special		Teacher	Teacher			Educational Therapist	Aide	Teacher	Aide	Teacher		Aide	Teacher		Aide	ıly
State Name: Vermont		Handicap Category	Blind	Partially Sighted		Deaf					Hard of Hearing	Emotionally Disturbed					Mentally Retarded		EMR			TMR			* Works with blind retarded only
St	ďī	Handica Code	H-1	H-2		H-4					H-5	1-H			_		H-8		6-H			H10			*

Sta	State Name: Vermont	Personnel/Pupil Contact Ratio	ot Ratio		Ä	ata Period	Data Period 1968–69	
ď		:		Special		Education Program Types	am Types	
Handica Code	Handicap Category	Occupation	Education Level	Residen- tial	Special	Day Special	Resource Itinerant	Itinerant
H-16	TMR (cont.)	Aide .	Secondary			1/15		
H-12	Speech Handicaps	Speech Pathologist	Elementary					1/80 *
		Communication Skills	Elementary					1/100 *
H-14	Special Learning Disa-	Teacher	Preschool	1/8	1/8			
	bilities		Elementary	1/8	1/8	1/8	1/15	1/15
		Aide	Elementary			1/10		
H-16	Physically Handicapped	Teacher	Preschool	1/15				
			Elementary	1/15				1/1
			Secondary	1/5			·	
H-18	Blind - MR	Teacher	Ungraded			1/4		
	Deaf - MR	Teacher	Ungraded	1/5				
		,						
								non
*	Caseload							

Esti-mated Employed 18 6 œ 7 99 12 71 Ŋ 15 Ŋ 18 57 13 Data Period 1968-69 Total 7595 25.5 6 12 'n S 12 97 52 Esti-mated Employed Unspecified Employed Special Education Personnel Estimated Requirements/Employment Comparison 1/~ Ungraded Esti-mated S ß ß Esti-mated Employed ~ 9 9 2 Secondary Education Level 24 27 4 'n 18 97 Esti-mated Employed 6 6 S 'n ហ 6 99 14 14 51 13 Elementary 6 œ 32 1/Based upon enrollment data only (no waiting list data available) $\frac{2}{3}$ /Calculation incomplete due to missing data $\frac{3}{3}$ /Employment data not available Esti-mated Employed Preschool Reg Certitied × × None Degree Level None None Total Total Total Total Total None Total None Total MA MA MA BA BA BA BA BA BA O/Counselor Partially Sighted A=Aide O=Other T/Emotionally Disturbed T/Emotionally Disturbed State Name: Vermont T/Educational Therapy Occupation T/Academic/Deaf T/Special/Deaf T=Teacher Th=Therapist O/ Tutor Blind T/EMR A/EMR

Vermont

ERIC *

1

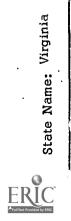
Esti-mated Employed 22 14 10 13 27 12 17 Data Period 1968-69 Tota! 14 2 2 37 65 Esti-mated Employed 10 0 Unspecified Employed Special Education Personnel Estimated Requirements/Employment Comparison $^{ extstyle J/}$ Ungraded Esti-mated Esti-mated Employed mated Employed Secondary Education Level 20 **E** E 12 ~ 7 œ 14 15 14 Elementary 13 5 1 30 63 Based upon enrollment data only (no waiting list data available)
 Calculation incomplete due to missing data
 Calculations cannot be made due to missing data Employed Preschool Esti-mated Degree Level None Total Total None Total Total Total Total None Total Total Total MA BA MA MA BA BA BA BA T/Special Learning Disabilitius A/Special Learning Disabilities A=Aide O=Other T/Physically Handicapped ı T/Communication Skills State Name: Vermont O/Speech Pathologist T/Mentally Retarded A/Mentally Retarded Oscupation Th=Therapist I/Blind MR I/Deaf MR T=Teacher T/TMR A/TMR

Vermont



Data Period 1968-69

Overview of Special Education Programs



Waiting 413 List Data Period 1968-69 Hospital Rapid Turnover Enrollments By Special Education Program Type 282 Itinerant 978 197 467 17,999 Resource Room 262 564 <u>:</u> 03 248 279 Day Special Class 501 11,752 1741 Enrollments In Special Education Special dential 262 523 233 177 1109 Class 157 Resi-Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Education Level Unspecified Special Learning Disabilities Physically Handicapped Handicap Category **Emotionally Disturbed** Visually Handicapped Hearing Handicapped Speech Handicaps State Name: Virginia EMR TMR H-15 H-10 Handicap Code H-12 H-14 9-H H-3 H-7 6-H

Virginia

State Name:

Virginia Hospital 1/100 Rapid Turnover Data Period 1968 - 69 Itinerant Special Education Program Types /100 1/50 1/40 1/60 1/40 Resource 1/30 1/60 1/20Room Special 1/13 Class 1/11 1/11 1/8 Day Special dential 1/60 1/50 Class 1/11 1/6 1/6 1/8 1/6 Education Level All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades All Grades Personnel/Pupil Contact Ratio Physical Therapist Occupation Consultant Therapist Attendant Attendant Teacher Teacher Teacher Teacher Teacher Teacher Teacher Aide Aide Neurologically Impaired **Emotionally Disturbed** Visually Handicapped Hearing Handicapped Handicap Category Physically impaired Speech Handicaps EMR TMR Handicap Code H-16 H-10H-12 **I-14** H-3 9-H 2-E 6-

Employed 248 152 14 117 125 723 72 178 26 28 .69 31 41 971 Data Period 1968 - 69 Total Esti-mated 129 110 .179 18 972 158 64 62 Employed 248 125 56 152 178 14 6 œ 69 œ 117 723 72 £ 4 58 72 Unspecified Esti-mated 129 110 972 179 18 158 64 62 Employed Special Education Personnel Estimated Requirements/Employment Comparison Ungraded Esti-mated Esti-mated Employed Esti-mated Employed Secondary Education Level Elementary Based upon enrollment data only (no waiting list data available) Employment data unavailable Esti-mated Employed Preschool Certified Degree Level Uncer Uncer Uncer Uncer Total Total Total Total Total ĕ g T/Neurologically Handicapped A-Aide O-Other T/Children with Hearing Disorders T/Emotionally Disturbed A/Emotionally Disturbed State Name: Virginia T/Mentally Retarded Occupation T/Hearing Impaired O/Attendant - TMR Th-Therapist T~Teacher Th/Speech T/Visually

Virginia

ŀ

ĺ

1-236

Virginia Esti-mared Employed 14 10 23 33 47 Data Period 1968-69 Total .28 62 21 Esti-mated Employed 10 33 14 47 Unspecified 23 28 62 62 21 Employed Special Education Personnel Estimated Requirements/Employment Comparison $\frac{1}{2}/$ Ungraded Preschool Elementary Secondary Ung Sstiral Employed Estirated Employed Employed Employed Estirated Employed Estirated Employed Em Education Level Based upon enrollment data only (no waiting list data available) Employment data unavailable Certified Degree Level Uncer. Total Total ä A-Aide O-Other I/Children with Crippling T/Neurologically (cont) State Name: Virginia O/Attendant for P.H. Occupation Th-Therapist Conditions Th/Physical 77

		 -							_	_			 1		, — ı			<u> </u>	<u>Vas</u>	<u>hin</u>	<u>gto</u>	n i			
Education Program									1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_{A@} O ⁱ ₹₹	iou vo	r													
Education Level (Age Ranges)	Secondary	High	16-21	16-21	16-21	16-21	16-21		16-21		16-21	16-21			16-21		16-21	16-2i							
Level (A	Seco	Hīđy L.•	13-15	13-15	13-15	13-15	13-15		13-15		13-15	13-15			13-15		13-15	13-15					state		
ucation	ntary	Elemer	6-12	6-12	6-12	6-12	6-12		6-12		6-21	6-21			6-12		6-12	6-12		6-12			to the		•
. Ed	loor	Presci	3-5	3-5		3-5	3-5		3-2		3-2	3-5			3-5		3-5	3–5		3-5			plicable		
	Handicap Category ${\cal V}$		Blind	Partially Sighted	'Visually Handicapped	Deaf ·	Hard of Hearing	Hearing Handicapped	Emotionally	Montally Retarded	EMR	IMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Speech and Heari		Brain Injured 3/		Homebound	Multiple Handicapped			If no entry is shown, category is not applicable to the state	Includes Language Disabilities Includes Neurologically Impaired	Called Orthopedically Handicapped
	oqe rqtcsb	Han	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	ਮੂ- <u>9</u>	H-10	H-11	H-12	H-13	H-14	H-15	91-H	H-17	H-18			न्रो	% [5	141



Data Period 1969-70 Enrollments By Special Education Program Type Enrollments In Special Education All Programs 340 697 374 182 41,816 51 Unspecified Education Elementary Elementary Secondary Secondary Preschool Preschool Level Physically Handicapped (Orthopedically Handicapped) Brain Injured (Neurologically Handicapped) Handicap Category State Name: Washington Speech Handicaps H-15 H-16 H-12Handicap Code

Washington

Waiting

48

41 47

121 41

Waiting List က 9 12 27 16 46 43 42 451 344 45 112 Data Period 1969-70 Enrcllments By Special Education Program Type Enrollments In Special Education Programs 38 5216 6398 45 159 185 1003 85 25 53 96 61 All Education Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Preschool Secondary Level Preschool Preschool Handicap Category Partially Sighted Hard of Hearing Blind Deaf IMR EMR H-10 Handicap Code H-2 H-4 H-5 6**-**H

Washington

57

699

Secondary

Preschool

Emctionally Disturbed

H-7

1283

Elementary

Secondary

410

522

State Name: Washington

Data Period 1969-70

					•	- !	j	- 1	1	- }	1	1	}	- }	- {		ŀ	۱ ا	Ì]]]	i
Special Education Program Types																						9.
Data Education Special	Schools Classes /6-1/101/6-1/10	/6-1/121/6-1/12	1/4-1/8	1/6~1/8	1/6-1/8	1/6-1/10	/6-1/101/6-1/10	/8-1/121/8-1/12	/8-1/161/8-1/12	1/6-1/8	1/8-1/10	/8-1/101/8-1/10	1/4-1/8	1/4								$\frac{1/8-1/10}{001}$
Special	Schools 1/6-1/10	1/6-1/12	1/4-1/8 1/4-1/8	1/6-1/8	1/6-1/8	1/6-1/101	1/6-1/10	1/8-1/12	1/8-1/16	1/6-1/8	1/8-1/10	1/8-1/10	1/4-1/8	1/4	/4							'8 and High School 1/ 12 and High School 1
ect Ratio	Level	All Grades	All Grades	All Grades	Elementary	Secondary*	Preschool	Elementary	Secondary**	Preschool	Elementary	Secondary	All Grades	All Grades	All Grades.							io 1/6-1/8 and o 1/8-1/12 and
Personnel/Pupil Contact Ratio Occupation Educati	Teacher	Teacher	Teacher	Teacher	Teacher		Teacher			Teacher	a		Teacher	Teacher	Teacher							Secondary is broken down into Junior High with ratio $1/6-1/8$ and High School $1/8-1/10$ Secondary is broken down into Junior High with ratio $1/8-1/12$ and High School $1/8-1/16$
State Name: Washington	Blind	Partially Sighted	Deaf	Hard of Hearing	Emotionally Disturbed		EMR			TMR			Brain Injured	Physicaliy Kandicapped	Multiple Handicapped	1						* Secondary is broken do
ndicap ode	Har C	H-2	H-4	H-5	H-7		6-H			H-10			H-15	E T	H-18							

Washington



1-341

Esti-mated Employed mated Employed Esti-mated Employed Esti-mated Employed Esti-mated Employed Esti-Data Period 1969-70 Total 991--1505 515-678 194-242 153-305 10-19 42-88 46-62 12-22 185 Unspecified Special Education Personnel Estimated Requirements/Employment Comparison Ungraded Secondary Education Level 12-16 290-378 505-774 8-15 73-91 5-8 4-8 87 Elementary 225-300 472-708 112-139 5-10 5-10 20-40 29-39 104 Esti-mated Employed Preschool 14-28 14-23 9-12 5-7 2-4 25 Certified Degree Level ď Ωķ 쑴 ğ цķ αķ ğ Uk T/Orthopedically Handicapped A-Aide O-Other State Name: Washington T/Emotionally Disturbed Occupation T/Partially Sighted T/Hard of Hearing Th-Therapist T-Teacher T/Blind T/Deaf T/TMR I/EMR

Total special education classroom teachers for 1968~69 was 1260. (No breakdown by handicap level available) Uk - Unknown

<u>Washington</u>

1260 Total

48-95

162-204

3-6

ď

T/Neurologically Handicapped

State Name: West Virginia Overview of Special Education Programs

Data Period 1969-70

استحرسا

- Constant

Decidence

Section 1

<u></u>	·																		We	st	<u>Vir</u>	ginia
E			-																			
Program	No Program Breakdown			×						×	X			X								
Education	Itinerant																	X				
Educ																						
	Residential Special Class												·	•			×					
3)																						
lange																				_	_	
Age F	<u>.</u> .		·															_			-	years
Level (
Education Level (Age Ranges)	•															-						the silation
. Educ	Unspecified			77		-	77			/7		77		77	77	,	77	/72				is not applicable to the states, mandatory legislation 6-21
	, .											tutional)										not appl mandate
												Instituti			ies							1 5-
	ory <u>1</u> /			ק			77		•			1			Disabilities		ped					catego 2-3 y
	Jatego		þ	cappe		ם	appe		ded			Severe,	sde	aring			dicap					wn, cation
	icap (Sighted	Jandi	·	earin	iandic	ly	Retar			dial,	andica	d He	earnir	red	v Han	ֿֿס				is shc legisî
	Handicap Category	73	Partially	Visually Handicapped		Hard of Hearing	Hearing Handicapped	Emotionaily	Montally Retarded			MR (Custodial,	Speech Handicaps	Speech and Hearing	Special Learning	Brair. Injured	Physically Handicapped	Homebound				entry
		Blind	Part	Visu	D⊱af	Harc	Hea	Emot	Men	EMR	TWR	MR (Spee	Spee	Spec	Brain	Phys	Hom				If no entry is shown, category Permissive legislation 2-3 year
	Handicap Code	H-1	H-2	H-3	H-4	H-5	9-H	H-7	81	H-9	H-10	H-11	H-12	H-13	H-14	H-15	H-16	H-17				7,21

ERIC Full Text Provided by ERIC

 337^{1-243}

West Virginia Waiting List Not Available Data Period 1969-70 Enrollments By Special Education Program Type All Programs 132 4179 2297 **Itiner**ant 1071 Enrollments In Special Education Residen-Special Class 143 tial Unspecified Unspecified Unspecified Unspecified Unspecified Education . Level Handicap Category Physically Handicapped Visually Handicapped State Name: West Virginia Speech and Hearing EMR and TMR Homebound н-9,1 0 Handicap Code 91-H I-13 H-17

24 10 10

Section 1

,								 	 _	, ,	 		W	es	t Vi	rgir	nia,	₋	 	
1969-70	n Types																			
Data Period 1969-70	n Prograr												-							
Data	Special Education Program Types	Residential Special Class	1/5-1/8	1/15	1/21	1/10-1/14	1/5-1/7													
act Ratio		Education Level	All Grades	All Grades	All Grades	All Grades	All Grades													
Personnel/Pupil Contact Ratio		Occupation	Teacher	Teacher	Teacher with Aide	Supervisor	Aides													
State Name: West Virginia		Handicap Gategory	Deaf	EMR		MR (Institutionalized)														
St	dЕ	Handics Sode	H-4	6-H		H-11														

West Virginia	Specie	al Ed	ucation	ersonnel	Estimate	Special Education Personnel Estimated Requirements/Employment Comparison	nents/En	ployment	Compari	son		Data Pe	Data Period 1969-70	9-70
Occupation		be i				Educ	Education L	Level			}			
A=Aide	Degree	311	Preschool	loot	Elementary	ntary	Secon	ıdary		Ungraded	Unspecified	ified	Total	al l
O=Other	Level	re:D	Esti- mated	Employed	Esti- mated	Employed	Esti- mated	Esti- mated Employed	Fsti- mated	Employed	1 1	Employed	Esti- mated	Employed
T/Mentally Retarged	Uk										1/	308	/ī	308
Th/Speech and Hearing	Uk										1,	31	/ī	31
T/Physically Handicapped											I	14	/ī	14
Part-Time	Uk											539		539
Full-Time	Ωķ											22		22
	Total										1/	561	17	561
														Ves
						i								
Calculations cannot be made due to missin Uk - Unknown	ue to mis	ssing	ıg data.											

ERIC Full Text Provided by ERIC

Data Period 1968-69

Overview of Special Education Programs State Name: Wisconsin

		Edu	cation I	Education Level (Age	ge Ranges)	es)		Education	1	Program	u	
de		I	Elementary	ntary	Secondary	ndary	lsi					
olbn <i>e</i> H aboO	Handicap Gategory $^{1\!\!\!1}/$	Preschoo	Primary	Inter- mediate]r. Hig'n	Sr.	itnebizeA	Special Schools	Day Special Class	Itinerant	No Progra	
H-1	Blind	1-6	5-9	10-12	13-15	16-20		X				
H-2	Partially Sighted	1–6	6-2	10-12	13-15	16-20			×.	×		
H-3	Visually Handicapped											
H-4	Deaf .	1-6	6-5	10-12	13-15	16-20		X	×			
H-5	Hard of Hearing	1-6	6-5	10-12	13-15	16-20				×		_
9-H	Hearing Handicapped			•								
H-7	Emotionally	1-6	5-9	10-12	13-15	16-20		Х		×		
H-8	Montally Retarded											
ਮ-9	EMR	1-6	6-9	10-12	13-15	16-20	Х	X			×	
H-10	TMR	1-6	5-9	10-12	13-15	16-20	×	X			×	
H-11	MR(Gustodial, Severe, Institutional)	1-6	5-9	10-12	13-15	16-20	X	X				
H-12	Speech Handicaps	1-6	5-9	10-12	13-15	16-20	•			×		
H-13	Speech and Hearing						•					
H-14	Special Learning Disabilities	1-6	5-6	10-12	13-15	16-20					-	
H-15	Brain Injured											
н-16	Physically Handicapped ^{2/}	1-6	5-9	10-12	13-15	16-20				×		
Н-17	Homebound											-
					,							
												-
1/2	If no entry is shown, category is not Orthopedic	licable	applicable to the state	tate								

Waiting List Data Period 1968-69 No Pro-Enrollments By Special Education Program Type gram Break-445 240 272 564 697 down Itinerant Special and 188 418 120 93 47 Itinerant Special Schools 114 129 σ 6 53 63 89 73 47 36 51 Enrollments In Special Education Resi-dential 90 22 Education Elementary Elementary Elementary Elementary Elementary Elementary Secondary Secondary Secondary Secondary Secondary Preschool Preschool Preschool Preschool Secondary Preschool Preschool . Level Handicap Category Emotionally Disturbed State Name: Wisconsin Partially Sighted Hard of Hearing Blind Deaf EMR Handicap Code **H-**2 H-5 H-7 6-H H-1 H-4

Wisc**o**nsin

94 107 . 107

13 72

Preschool

IMR

H-10

153

Secondary

Ungraded

Elementary

1774

Waiting Data Period 1968-69 No Program Break-down Enrollments By Special Education Program Type 1012 223 Itinerant Day Special a**nd** Itinerant 2727 873 19,708 2151 Special Schools 92 59 Enrollments In Special Education Resi-dential 266 63 211 Elementa y Education Elementary Elementary Elementary Secondary Secondary Preschool Preschool Ungraded . Level Special Learning Disabilities Handicap Category Physically Handicapped MR (Institutionalized) Speech Handicaps State Name: Wisconsin H-14 H-16 H-11 H-12 Handicap Code

Wisconsin

Data Period 1958-69 Special Education Program Types 1/30-1/200 1/5-1/10 1/8-1/12 1/10-1/15 1/14-1/20Programs 1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/121/15 1/4 1/4 1/4 1/4 Resource All 1/15 1/15 Special 1/8 1/8 Day Education Level Elementary Elementary Elementary All Grades Elementary All Grades Elementary All Grades All Grades All Grades Secondary Preschool Secondary Secondary Preschool Secondary Secondary Preschool Preschool Preschool Personnel/Pupil Contact Ratio Occupation Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Teacher Special Learn. Disability Physically Handicapped Emotionally Disturbed Handicap Category State Name: Wisconsin Speech Handicaps Partially Sighted Hard of Hearing Blind Deaf EMR IMR H-16 Handicap Code H-12 H-14 H-10**I-5** H-7 6-H H-2 H-4 <u>H</u>-1

Wisconsin

Special Education Personnel Estimated Requirements/Employment Comparison 1/ State Name: Wisconsin

Data Period 1968-69

Esti-mated Employed 38 2 117 2 Total 97-1453 119 <u>4</u>1 22-848 332-827 67 Employed Unspecified 122-548 67 232-827 Esti-mated Employed Ungraded Esti-mated Esti-mated Employed 769 92 99 21 52 Secondary Level 38-553/ 40 62 Education Employed 10 26 564 17 Elenentary 37-563/ 7 Esti-mated 40 13 Esti-mated Employed 22 29 Preschool 22-343/ 17 Certified Degree Level Ŕ ď T/Special Learning Disabilities A-Aide O-Other T/Physically Handicapped T/Emotionally Disturbed T/Visually Handicapped T/Hearing Handicapped T/Mentally Retarded T/Speech Handicaps Occupation Th-Therapist T/EMR T/TMR

Based upon enrollment data only (no waiting list data available) <u> 기의</u> 의4)

Uk - Unknown

Calculations cannot be made due to missing data Calculations incomplete due to missing data Employment data unavailable

Data Period 1968-1969

Programs
Education F
of Special
Overview

				$\overline{}$												$\overline{}$			$\overline{}$	r -			
		·																				 	
ជ																					·		
Program	Rteskdown No Program				×	×		×		X	×		×				×					ŀ	
1	Kednlar Classrcom	×	×																				
Education	Special Schools				×					×	×	×											
	Residential				×					×	×	×		•			í						
										·						-							
anges																							
Age R	· · · · · · · · · · · · · · · · · · ·		_				·																
evel (Secondary																					tate	
Education Level (Age Ranges)	Elementary			*	8	776	1,															to the s	
Edu	Leschool						7	\$														applicable to the state	
	Handicap Category 1/	Blind	Partially Sighted	Visually Handicapped	Deaf	Hard of Hearing	Hearing Handicapped	Emotionally Disturbed	Montally Retarded	EMR	TMR	MR (Custodial, Severe, Institutional)	Speech Handicaps	Spaech and Hearing	Special Learning Disabilities	Brain Injured	Physically Handicapped	Homebound				If no entry is shown, category is not app	
	. Handicap Code	H-1	H-2	H-3	H-4	E-H	9H	L-H	8-H	6-ਸ	H-10	H-11	H-12	H-13	H-14	H-15	H-16	Н-17				7.	

Wyoming

State Name: Wyoming

Wyoming Waiting List аларытыры т фи Data Period 1968-1969 Enrollments By Special Education Program Type Breakdown Program 89 505 73 15 19 Regular Classrooms 34 22 32 Special Schools 14 14 28 97 Enrollments In Special Education Residen-tial 40 14.) 182 244 Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified **Inspecified** Elementary Elementary Elementary Education Secondary Secondary Secondary Preschool Preschool . Level Handicap Category Physically Handicapped **Emotionally Disturbed** MR (Institutionalized) Speech Handicaps Partially Sighted Hard of Hearing State Name: Wyoming Blind Deaf TMR EMR H-10 H-16 H-12 Code H-II H-5 H-2 H-4 H-7 6-H Hguqicsb

I

1

7

Automobiles,

-

A CONTRACTOR OF THE PARTY OF TH

1

															V	۷уо	mir	ıg		
69								,							*					
Data Period 1968-1969	ım Types																			
ata Period	ion Progra																			
Ö	Special Education Program Types		,										,							- [
·	Speci	All Programs	1/10	1/10	1/10	1/10	1/10	1/6	1/5	1/5	1/50	1/10								
aci Ratio		Education Level	Ali Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades	All Grades								
Personnel/Pupil Contact Ratio		Occupation	Teacher	Teacher	Teacher	Teacher	Teacher	Teacher	Teacher	Teacher	Therapist	Teacher								-
State Name: Wyoming		Handicap Category	Blind	Partially Sighted	Deaf	Hard of Hearing	Emotionally Disturbed	EMR	TMR	MR (Institutionalized)	Speech Handicaps	Physically Handicapped								
St	эb	Handic Gode	H-1	H-2	H-4	H-5	H-7	H-9	H-10	н-п	H-12	97-H								

Esti-mated Employed Data Period 1968-1969 Total 6.5 110 24 54 Esti-mated Employed mated Employed 2 2 2 Unspectfied 110 6 54 57 Special Education Personnel Estimated Requirements/Employment Comparison 1/Ungraded Esti-mated Employed mated Employed mated Employed 17/2 Secondary Education Level या या या Elementary Based upon enrollme: . data only (no waiting list data evallable) Employment data unavailable Uk - Unknown Preschool 'n Degree Level 취품 ď ď. ЦĶ цķ ďķ ă 늄 늄 A-Aide O-Other T/Physically Handicapped T/Emotionally Disturbed State Name: Wyoming T/Mentally Retarded Occupation T/Partially Sighted T/Hard of Hearing Th-Therapist T-Teacher Th/Speech T/Deaf T/EMR T/TMR 72

APPENDIX 2

COST ESTIMATES FOR IMPLEMENTATION AND MAINTENANCE OF INFORMATION FLOW

INTRODUCTION

- As a result of the survey visit to each state, recommendations were made for the development and implementation of a special education information flow that would improve the quality and quantity of data available to each state special education agency, and would also provide the data elements necessary to support the manpower requirements projection model application. These recommended actions are presented in the individual state analysis reports contained in Part D, State Analysis Reports, of this Phase III Report.
- 2.2 The specific resources needed to implement the recommendations and maintain the system once it is established are contained in Section VIII, Resource Requirements, of each state analysis report. For the convenience of the Bureau of Education for the Handicapped, these resource requirements are summarized in this appendix.

DISCUSSION OF COST ESTIMATES

2.3 The resource requirements to implement and maintain the information flow are contained in individual tables for each state. The format and content of these tables are described in the following paragraphs.

Resource Category

2.4 The resources required are broken down by type of manpower and computer application. The special education staff category refers to those professionals responsible for the management and administration of the state



special education agency or its equivalent. The task for which they would be primarily responsible is coordination with the local districts and other state agencies to ensure their understanding of the data requirements and participation in the information flow process. This would include training local district and other agencies' personnel to fill out the new forms engendering support for the information system, and ensuring completeness and validity of reported data.

- 2.5 The form-designing tasks include the responsibility for creating forms that will permit the required data to be collected in an orderly and efficient manner. The forms must be easy to understand and convertible to computer input format. Many existing reporting formats have been prepared by those with little skill in designing good reporting forms.
- 2.6 The tasks of the systems analyst include data element evaluation, data source determination, systems analysis, preparation of systems specification, procedure preparation, and system validation.
- 2.7 The programmer is responsible for preparing the computer programs that will accept the formatted input data, process them according to specifications, and produce the required output formats.
- 2.8 Clerical personnel are responsible for the manual procedures necessary to the sorting, filing, extraction, and summarization of information where automated procedures have not been applied.
- 2.9 Keypunch operators convert the field data to a format acceptable for input to the computer.
- 2.10 The computer resources have been subdivided into processing requirements and Manpower Requirements Projection Model requirements because the MRPM computer requires a minimum of 24,000-word storage capacity, whereas most information processing requirements do not require such a capacity.

Estimated Rate

- 2.11 The estimated rate is the salary that personnel could receive or, for the computer, the usage rate that would be charged to the special education agency for use of the machine. In some cases, no usage charge has been applied, because either there would be no charge to the special education agency or the rate was not known and therefore not assumed by the contractor.
- 2.12 With the exception of the special education staff, the salary rates applied were derived from information contained in an article in <u>Business Automation Magazine.</u> The rates used approximated the average rates for senior people in each category. Rates for special education personnel were not available; however, to represent the cost of this resource category in the cost estimate, a rate similar to that of the senior systems analyst was applied.



2-2

 $[\]frac{1}{2}$ "EDP Salary Study-1969," <u>Business Automation Magazine</u>, July 1969.

Implementation

2.13 The installation of an information system involves two major phases: the design and implementation phase, and the maintenance or operating phase. In the design and implementation phase, the system concept is developed, the system design formulated, computer programs are written, the system is tested and debugged, and the system validation is completed. At the conclusion of the phase, the system should be operational. Costs associated with this phase are one-time expenditures.

Maintenance

2.14 This phase is concerned with ensuring that the system is operational and responsive to user requirements. This includes coordination of inputs, quality control, improvements, and preparation of special report specifications. Costs in this phase are anticipated annual expenditures.

Type of Information System

2.15 The spaces immediately below the "Implementation" and "Maintenance" titles contain a very brief identification of the type(s) of system(s) recommended in the state analysis report. When alternative recommendations have been made, more than one system appears under each phase heading.

Estimated Time

2.16 This column contains an estimate of the working time required by each resource to accomplish the implementation and maintenance of the information flow. The units of time are as indicated in the estimated rate column.

Cost

2.17 The Cost column contains a multiplicative conversion of the Estimated Rate and Estimated Time columns. Values have been rounded off to the nearest five dollars.



				*												Alab Alas		a						
COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	* For MRPM use, since the in-	a FORTRAN compiler and the	not written in PL/1, outside	computer time must be leased								Comments:	*Computer:IBM 360/40, no	usaye cost assumed ** Included in System Analyst	time					,			
PM AP		Manual System	Cost	2100				1000		, - -	75	\$3175			Cost \$									
JD MR	nce		日日	2				2		0	5,		nce		Est Time									
INT AN	Maintenance	Automated Data Sum Svs	Cost \$	2100		100	200		440		75	\$2915	Maintenance	Automated	Cost \$	1060		265	215		125			\$1665
LOP MI	Me	Automated Data Sum S	Est Time	2		.1	. 25		200	2	.5		Me	Auton	Est Time	1		. 25	.25		50	3	5,	₩.
DEVE			Cost \$	6300	350			1000	10		75	\$7735			Cost \$									
i dati	ation	Manual System	Est	9	5.			2	4	0	.5	97	tion		Est Time			- I						
SATIO	Implementation	ated I		6300	350	525	800		440		75	\$8490	Implementation	eted	Cost	2220		1590	860		150			\$4820
EDUC	Impl	Automated Data Sum Sv	Est Time	9	٦.	.5	1		200	4	.5	0,	Imple	Autometed	Est Time	2	*	1.5	1		90	5	.5	0,
FOR SPECIAI		Estimated	Rate \$	1.050/mo.	-ош/002	1050 /mo.	· om/ 008	500 /mo-	2.20 /hr.	/hr.	150 /hr.	TOTALS		Estimated		1050/mo.	·om/	1060/mc.	. our/ 098	/mo.	2.50 /hr.	* /hr.	* /hr.	TOTALS
STIMATE 1	Alabama			iff	ner	rst				Process	MRPM ⋆	TO	-10	Bus		tafí	ner	yst				Process	MRPM	TO
COSTE	State: Alak	gozirosed	Category	Spec. Ed. Steff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Compliter			State.		Category	Spac, Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	000000000000000000000000000000000000000	Compares	



Arizona Arkansas

COST ESTIM	ATE FOR SPECIA	T FDA(CATIO	N DAT	A DEVE	LOPME	NT AN	D MR	M API	COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
State: Arizona	.,	Imp	Implementation	ation			Maintenance	nce	1	Comments:
1 1	Estimated	Automated Intradepart-	part-	Autom	Automated * Intradepart-	Automated (Both)	nated h)			Processing Computer:
Kesource Category		Est Time	Cost \$	Est Time	Cost	,	Cost \$	Est Time	Cost \$	Remington 9300 MRPM Computer to be rented,
Spec. Ed. Staff	1030 /mo.	2	2060	1	1030	•5	515			usage rate assumed
Forms Designer		**								* In addition to the cost of
System Analyst	1030 /mo.	. 2	2060	• 5	515	.25	260			the automated intradepart-
Progressmer.	ош/ 098	1	860	.25	215	. 25	215	٠		metrer system
Clerical	/mo									time
Keypunch	2,30 /hr.	100	230			90	200			
Computer Process	ess 40 /hr.	9	240		-	4	160			
MRPM	150	5.	75			.5	75			
	TOTALS		\$5525	<u> </u>	\$1760	₩.	\$1425		-	
State. Arkangae		Imple	Implementation	tion		Ma	Maintenance	nce		Comments:
- 1	Detimated	Auton	Automated	Manual	nal	Auton	Automated	Manual	lai	Processing Computer:
Resource		Est	Cost	Est	Cost	Est	Cost	Est	Cost	IBM 360/25
Catagory	\$	Time	() }	Time	ક્ક	0	₩.	Time	\$	MRPM Computer: minimum
Spec. Ed. Staff	.om/ 066	2	1980	2	1980	5.	495	.5	495	24K word storage required
Forms Designer	/mo.	*								* Included in System Analyst
System Analyst	.om/066	1.5	1485	1	990	.25	225	.25	225	time
Frogrammer	840 /mo.	1	840			.25	210			
Clerical	400/mo.			1	400			2	800	
Keypunch	2.30 /hr.	144	330	4	10	140	330			
Process	ess 100/hr.	4	400			.2	200			
MRPM	M 100 /hr.	5	50	.5	50	5	50	5	50	
	TOTALS		\$4485		\$3430	\$	\$1510	\$	\$1570	

California Colorado

COSTES	TIMATE	COST ESTIMATE FOR SPECIA	L EDU(CATIO	N DAT	A DEVE	LOPMI	INT AN	ID MRE	'M API	IAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	r1
State: California	omia		[dm]	Implementation	ation		Modific	Maintenance	nce		Comments:	
Resource		Estimated Rate	Existing Automated Proc	Proc	Fist		Existr mateo	Existing Auto- mated Proc	Est	Cost	*No computer usage charge assumed	· · · · · ·
Category		€	Time	\$	Time	₩	Time		Time	\$		
Spec. Ed. Staff	££	1060/mo.	4	4240			2	2120				
Forms Designer	er	700/mo	П	700								_
System Analyst	3t	1060 /mo.	. 1	1060			.25	265				_
Programmer		·om/.098	2	1720			.25	215				·
Clerical		/mo.										
Keypunch		2.50 /hr.	380	950			360	900				
Computer	Process	* /hr.	4				2					
	MRPM	* /hr.	. 5				.5					
	T(TOTALS		\$8670				\$3500				
State. Colorado	0.00		Imple	Implementation	tion		Mē	Maintenance	nce		Comments:	
1 9	2	Estimated	Auton	Automated			Automated	nated			* Computer: IBM 360/50	
Category		Rate \$	Est Time	Cost \$	Est Time	Cost	Est Time	Cost \$	Est Time	Cost \$	No computer usage charge assumed	
Spec. Ed. Staff	äff	1030 /mo.	2	2060			1	1030				olo
Forms Designer	ner	700/mo.	.5	350								orad
System Analyst	rst	1030/mo.	2	2060			.25	250				0
Programmer		860/mo.	-	860			.25	215				
Clerical		/mo.										
Keypunch		2.30/hr.	200	460			180	435			•	
I Gmuniter	Process	* /hr.	5				3				,	_
Compared	MRPM	* /hr.	.5				.5					<u>.</u>
	ŢĆ	TOTALS		\$5790			"	\$1930				

Connecticut Delaware

COSTE	STIMATE	FOR SPECIAL	L EDUC	ATION	J DAT) DEVE	LOPME	NA TN	D MRI	PM AP	COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
State: Con	Connecticut		Impl	Implementation	ation		Mè	Maintenance	nce		Comments:
Resource		Estimated	Automated	ated			Automated	ated			* Computer time must be leased
Category		Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	
Spec. Ed. St	Stafí	1060 /mo.	5	5300			2	2120			
Forms Designer	ner	700 / mo	ι	700							
System Analyst	rst	1060 /mo.	3	3180			.25	265			
Programmer		.om/098	1.5	1290			.25	215			
Clerical		·om/									
Keypunch		5.00 /hr.	180	900			17.0	850			
Computer	Process	100 /hr.	9	600			4	400			
	MRPM	150 /hr.	.5	75			.5	75			
	TC	TOTALS	\$	\$12105			Ø7	\$5925			
Ctate. Dola	Dolemeno		Imple	Implementation	tion		Ma	Maintenance	nce		Comments:
	waie	Detimated	Automated	ated			Automated	ated			Processing Computer is a
Resource Category	<u> </u>	Rate	Est Time	Cost	Est	Cost \$	Est Time	Cost	Est Time	Cost	1401 Model G * MRPM Computer to be
Spec. Ed. Staff	taff	1040 /mo.		2080			1	1040			rented
Forms Designer	gner	700/mo.	1	200							
System Analyst	lyst	1040/mo.	2	2080			.25	260			
Programmer		870/mo.	1,5	1305			.25	220			
Clerical		/mo.									
Keypunch		2.50/hr.	30	75			25	65			
Completer	Process	0 /hr.	4				2				
	MRPM*	150/hr.	•5	75			.5	75			
	TC	TOTALS	ज	\$6315	:		.	\$1660			



Florida Georgia

COST ESTIMATE FOR SPE		L EDUC	CATIO	N DATA	DEVE	LOPME	INT AN	ID MRP	M AP	CIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
State: Florida		Impl	Implementation	ation		Ma	Maintenance	nce		Comments:
1 2	Estimated	Auto. Data Summary System	Data Iry n			Auto. Data Summary System	Data ary n			01/076 3441
Category	Rate \$	Est Time	Cost \$	Est. Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Computer: 15M 300/40 * No computer usage charge
Spec. Ed. Staff	.1000 mo.	2	2000			1	1000			assumed
Forms Designer	700 /mo-	1	700							
System Analyst	1000/mo.	1	1000							
Programmer	870/mo.	1	870			.25	200			
Clerical	/mo.									
Keypunch	2.30/hr.	90	210			80	185			
Computer Process	* /hr.	4				2				
MRPM	* /hr.	•5				.5				
).L	TOTALS		\$4780			0,	\$1385			
State: Georgia		Impl	Implementation	ation		Mē	Maintenance	nce		Comments:
1 3	Estimated	Automated	ated			Automated	ated		_	Computer: IBM 360
Category	Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est	Cost \$	Est Time	Cost \$	
Spec. Ed. Staff	1000 /mo.	2	2000			1	1000			
Forms Designer	700 /mo.	.5	350							
System Analyst	1000 /mo.	.3	3000			.25	250			
Programmer	870 /mo.	1.5	1300			.1	90		-	
Clerical	/mo.									
Keypunch	2.30 /hr.	180	415			160	365			
Computer Process	112 /hr.	S	560			3	336			
MRPM	112 /hr.	.5	55			S.	55			
)L	TOTALS	47	\$7680			₩.	\$2096			



Hawaii Idaho

COSTE	STIMATE	FOR SPECIA	L EDU	CATIO	N DAT	A DEVE	LOP ME	'NT AN	ID MRF	M API	COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	
State: Hawaii	ati		Impl	Implementation	ition		Ma	Maintenance	ince		Comments:	
1 %		Estimated	e ~	Sum- System	Pupil Acctg System	pil Acctg System	10	E	Pupil Sys		* No computer usage charge	
Category	,	Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Dallingo	
Spec. Ed. S	Staff	1060 /mo.	-1	1060	2	2120	.5	530	1	1060		
Forms Designer	gner	.om/008	.75	600	1	800						
System Analyst	lyst	1060 /mo.			1	1060			.1	105		
Programmer		860 /mc.			1	098			• 25	215		
Clerical		N	• 5	250			•.5	250				
Keypunch		2,50 /hr.	4	10	100	250	-4	10	20	50		
Computer	Process	* /hr.	1		4		•.5		1			
ioandiiioo	MRPM	* /hr.	• 5		•2		3°		.5			
	TC	TOTALS		\$1920		\$4290		\$190	l i	\$1430		
State: Idaho			Imp	Implementation	ation		Ma	Maintenance	nce		Comments:	
Reconno		Estimated	Automated	nated			Automated	a ted			*Computer:IBM 360/40, no	
Category		Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est	Cost	Est Time	Cost \$	usage charge assumed	
Spec. Ed. St	Staff	1030 mc.	1.5	1030			.25	2 60			** Included in System Analyst	
Forms Designer	ner	/mo.	` * *									
System Analyst	rst	1030,/mo.	1,5	1545			.25	260				Ida
Programmer		.cm/098	1	860			.25	215	•			ho
Clerical		·om/										
Keypunch		2.30/hr.	100	230			90	2 10				
Computer	Process	* /hr.	4				2					
_	MRPM	* /hr.										
	TC	TOTALS		\$3665				\$945				· 1



Illinois Indiana

QR S	PECIAL EDUCATIO	N DATA) DEVE	LOPME	NT AN	D MRPM	cost estimate for special education data development and mrpm application at state level
Implementation	اتد	ation		Ma	Maintenance	ace.	Comments:
Estimated Automated	_			Automa ted	na ted		Computer: Honeywell 1250
Rate Est Cost \$	لسا	Est Time	Cost \$	Est Time	Cost 5	Est Cost Time \$	* Computer usage charge not assumed
1040 mo. 3 3120	2] c		1.5	1560		
700/mo5 3	350						
1040/mo. 2.5 25	2590			.25	260		
850/mo- 1 8	850	-		.25	215		
0.							
2.50/hr. 100	250			90	22 5		
* /hr. 7				5	-		
* /hr5				.5			
TOTALS \$7160	္က			Ψ,	\$2260		
Implementation	1 FI	tation		Ma	Maintenance	nce	Comments:
Estimated Automated				Automated	ated		*Computer - IBM360/50no
Rate Est Cost \$	1 11	Est Time	Cost \$	Est Time	Cost \$	Est Co Time \$	Cost computer usage cost
1040 mo. 2 20	2080			.5	520		**Included in Suctem Analust
/mo. **							time time
1040/mo. 2 2	2080			.25	260		
850/mo. I	850			.25	210		
/mo.							
2.50/hr. 200 5	200			180	450		
* /hr. 6				4			
* /hr5				.5			
TOTALS \$5510	10			\$	\$1440		

Iowa Kansas

	_										-	_						Kan	sas					
COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	Computers: IBM 1401	IBM : 60/40	assumed daaye charge nor									Comments:		Computer RCA Spectra 70									
PM AP			Cost	+										Partially	Automated Est Cost Time \$	1020		100	80	500	65	155	40	\$1960
VD MR	ance		Est Time	_									ance	Part	Auton Est Time	1			.1	1	30	7	5*	-
INT AI	Maintenance	na ted	Cost	1530		255	205	250	290		,	\$2530	Maintenance	11y	Automated Est Cost Time \$	1020		255	205	:	220	310	40	\$2050
LOPMI	^S M	Automated	Est	1.5		.25	.25	.5	130	4	.5		Mē	Fully	Autor Est Time	1		.25	.25		100	4	• 5	
A DEVE			Cost											Partially	Automated st Cost ime \$	2040	700	1020	410	500	65	230	40	\$5002
N DAT	tion		Est Time										ation	Par	Auto Est Time	2	1	1	.5	1	30	ဗ	• 5	
CATIOI	Implementation	Automated	Cost	3060	350	2040	820	250	310		,	\$6830	Implementation		Automated st Cost me \$	2040	200	2550	820		240	385	40	\$6775
L EDUC	Impl	Auto	Est		<u> </u>	2	τ	5.	140	5	5 *		Impl	Fully	Auro Est Time	2	1	2.5	1		110	5	• 5	
FOR SPECIAL		7.044 m 0.40 m		1020 mo.		1020/mo.	820/mo.	500/mo.	2.20/hr.	* /hr.	* /hr.	TOTALS		Estimated	Rate \$	1020 mo.	700/mo.	102 Q/mo.	820/mo.	500/mo.	2.20/hr.	77/hr.	77/hr.	TOTALS
STIMATE				Staff	gner	lyst				Process	MRPM	TC	Kansas			taff	ner	yst			•	Process	MRPM	TC
COST	State. Towa	201	Resource	Scec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	410	Comparer		State: Kan		Resource Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Computer	•	

Louisiana Computer must be purchased * Does not include computer * No computer usage charge COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL usage cost estimate assumed or leased Comments: Comments: Cost \$ Cost \$ Est Time Est Time Maintenance Maintenance Est Cost Time \$ \$1610 066 160 105 200 510 250 210 **2**10 n \$2915 Data Sum-mary Sys. Cost \$ Automated Est Time .25 .25 .25 ι, 230 20 Cost \$ Cost Est Time Est Time Implementation
Data Summary Sys. Implementation \$6055 87.5 Cost Cost \$ 4200 525 800 530 2970 200 2970 840 \$1665 185 Automated Est Time Est Time Ŋ 'n ď. 240 80 2.20/hr. hr. 700/mo. /mo. om 066 700/mo-/mo-1050 mo. 1050/mo. /¤: .om/066 840/mo-/hr.| 800/mo. /hr. 2.30/hr. Estimated Estimated Rate \$ Rate \$ TOTALS TOTALS * * Process MRPM Process MRPW Louisiana Kentucky Spec. Ed. Staff Forms Designer System Analyst Spec. Ed. Staff Forms Designer System Analyst Category Resource Resource Programmer Keypunch Programmer Computer Clerical **Seypunch** Computer State: Clerical State:

Kentucky

				. •															aine ary		d			
UCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	0/07c year	* MRPM Implementation not	recommended	Included in Systems Design Time		•						Comments:	Process Computer-IBM 360/20	MRPM Computer-IBM 1460 * In addition to Intradepart-	mental system	** Included in System Analyst	time		•				
M APPI			Cost												Cost \$				_					
) MRP	nce		Est Time		•								nce		Est Time									
IT ANI	Maintenance	pate	Cost	260		260	215		90	160		\$985	Maintenance	ated h)	Cost \$	520		092	220		75	40	30	\$1145
OP MEN	Ma	Antomated	Est. Time	_		.25	.25		40	2			Me	Automated (both)	Est	.5		.25	.25		30	2	.5	₩
DEVEL			Cost											ited* part-	Cost \$	520		520	220					\$1260
DATA	tion		Est										ıtion	Automated* Interdepart-	Est Time	.5		.5	.25					
ATION	Implementation	ptod				1575	425		115	320		\$3485	Implementation	ted part-	Cost \$	3120		2080	1300		100	80	30	\$6710
EDUCA	Imple	Automatod	Est		*	1.5	• 5		50	4		41	Imple	Automated Intradepart-	Est	3	*	2	1.5		40	4	•5	₩.
COST ESTIMATE FOR SPECIAL ED			Estimated Rate	om C	/mo	1050/mo.	.om/058	/mo.	2.30/hr.	80/hr.	* /hr.	TOTALS		Estimated I	Rate \$	1040 mo.	·om/	1040/mc.	870/mo-	.om/	2.50/hr.	20/hr.	60/hr.	TOTALS
STIMATE F		Maine		Staff	gner	lyst				Process	MRPM	TC	Maryland			Staff	ner	yst				Process	MRPM	TO
COST		State: Ma	Resource Category	Spec. Ed.	Forms Designer		Programmer	Clerical	Keypunch		Computer		State: Mar		Category	pec. Ed. St	orms Designer	ystem Analyst	rogrammer	lerical	eypunch	Sommer		

:4);

Massachusetts Michigan

					-											101	ich:	ıyaı	. 1					
Implementation Maintenance Comments:	Process Computer-Honeywell	200	MRPM computer to be rented	* This is in addition to the	cost of the intradepartmental	מאַמרפווו	** Included in System Analyst		•	· -			Comments:	* This is in addition to the cost	of the Intradepartmental System	time	Computer: CDC 6600			,				The second second second second second second second second second second second second second second second se
		Cost	1.5		_		_								Cost \$									
ance		Est	Time						_				nce		Est									
. , Maintenance	tomated	Cost	\$	530		530	430	250	1000	100	50	\$2890	Maintenance	ated	Cost \$	510		510	210		250	200	50	\$1730
×	Am	ES	Time	5		Ċ.	.5	.5	400	2	•5		Ma	Automated	Est Time	.5	_	.5	. 25		100	2	.5	63 j
	Automated * Interdepart-	Cost	€\$	2120		1590	430					\$4140		ted * part-	Cost	510		510	425			100		\$1545
tíon	Autom	menta Est	Time	2		1.5	•5						tion	Automated * Interdepart-	Est Time	.5		.5	.5					\$
Implementation	sted spart-	Cost	₩	3180		4240	1720	200	1000	200	50	\$10890	Implemertation	ted part-	Cost Sest	1020		2040	850		250	200	50	\$4410
Impie	Automated Intradepart-	menta Est	Time	3	*	4	2	1	400	4	•5	₩.	Imple	Automated Intradepart-	men Est Time		**	2	1		100	2	.5	\$
Ų	100+0 m 1+1	Rate	↔	1060 mo.	/mo.	1060/mo.	.om/098	500/mo.	2.50/hr.	50/hr.	100/nr.	TOTALS		Estimated		1020 /mo.	/mo.	1020 /mo.	850 /mo	/mo	2.50 /hr.	100 /hr.	100 /hr.	TOTALS
Maccaphicotts	1asnii)		_	Staff	gner	lyst				Process	MRPM	TC	Michigan			taff	mer	yst				Process	MRPM	TC
Ctato. Maccachicoffs	1	Resource	Category	Spac. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypurch		Computer		State: Mic		Resource Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Gembuter		

Minnesota Mississippi

	FOR SPECIA	L EDU	CATIO	V DAT	A DEVE	LOPM	INT AN	D MR	PM API	COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
k.ote: Minnesota		Imp	Implementation	tion		M	Maintenance	nce		Comments:
Resource	Estimated	Automated	ated			Autor	Automated			* No computer usage goet
Category	Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	assumed
Spec. Ed. Staff	1020 /mo.	2	2040			1	1020			
Forms Designer	700 /mo.	• 5	350							
System Analyst	1020 /mo.	2	2040			.25	255			
Programmer	820 /mo.	1	820			.1	.80			
Clerical	/mo									
Keypunch	2.20 /hr.	410	900			400	880			
Computer Process	*	9				4				
MRPM	* /hr.	• 5	•			•5				
I	TOTALS	\$	\$6150			93	\$2235			
State: Mississippi		Impl	Implementation	tíon		Mě	Maintenance	nce		Comments:
3	Estimated	Autor	Automated			Autor	Automated			* Keypunching cost is included
Category	Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	er rei
Spac. Ed. Staff	1050 /mo.	3	3150			1	1050			Computer: Honeywell 200
Forms Designer	700/mo.	1	002							
System Analyst	1050/mo.	3	3150			.25	260			
Programmer	800/mo.	-	800				80			
Clerical	/mo.									
Keypunch	/hr.	150	*			140	*			•.
Process	, 116.32/hr.	3	349			2	233			
MRPM	116.32/hr.	• 5	59			.5	59			
I	TOTALS	07	\$8208				\$1662			

Missouri Mon**t**ana

1		Impl	Implementation	tion		Ma	Maintenance	nce		Comments:
State: Missouri		Automated	ated	Tabulation	ı	Automated Roster		Tabulation	tion	*Committee Time will base to be
Resource	Rate	Fst	Cost	Est	يبا	Est (Est	Cost	leased
Category	₩.	Time	\$	0	\$	0		0	₩	Committee 18M 350/30
Spec. Ed. Staff	1020 /mo.	3	3060	2	2040	-	1020	1	1020	
Forms Designer	700 /mo.	.25	175	. 5	350					
System Analyst	1020 /mo.	3	3060	1.5	1530	.5	510	.25	255	
Programmer	820 /mo.	1.5	1250	(1)	(820)	.25	205	(1)	(80)	
Clerical	500 /mo.			3	1500			3	1500	
Keypunch	2.20 /hr.	180	400	(20)	(155)	20	45	(09)	(130)	
Process	ss 0 /hr.	10		(4)		4		(3)		
MRPM*	150	5•	75	5.	75	.5	75	.5	75	
	TOTALS		\$8020	Manual Auto	1,54,75)	i	\$1855	Manual Auto.	3850	
State: Montana		Imp	Implementation	ation		Ma	Maintenance	nce		Comments:
	Estimated	Autor	Automated			Automated	ated			* Included in System Analyst
Category	Rate \$	Est Time	Cost \$	Est	Cost	Est Time	Cost	Est Time	Cost \$	** MRPM not recommended for
Spec. Ed. Staff	.1030 /mo.	1	1030			.5	515			near term implementation
Forms Designer	·om/	*								
System Analyst	1030 /mo.	1.5	1545			.25	260	Ì	Ţ	•
Programmer	860 /mo	3	430			.25	215	•		
Clerical	400 /mo.	5.	200			.5	200			
Keypunch	2.30 /hr.	100	230			100	230			
Computer	s 50 /hr.	4	100			2	100			
MRPM**	** /hr.									
	TOTALS		\$3535			\$1	\$1520			
						i				

COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

Nebraska Nevada

i												_]	<u> </u>			Ŋ	eva	ada					×	_
IAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	* Time leased from Department of Administrative Services;	rate assumed				•		•				Comments:	Computer: IBM 360/50										
PM AP		ual	Cost \$	1020		100		1000	•		75	\$2195			Cost \$									
D MR	nce	Manual	Est Time	1		.1		2			.5	Ĭ	nce		Est Time									
NT AN	Maintenance	ated	Cost \$	1020		255	80		200	450.	75	\$2080	Maintenance	nated	Cost \$	1030		260	90		50	65	35	\$1530
LOP ME	Mê	Automated	Est Time	1		.25	-1		90	3	.5	O.	Mē	Automated	Est Time	1		.25	.1		22	-	5	0,
DEVE		ıal	Cost \$	2040	700	1020		1000			75	\$4835			Cost \$									
. EDUCATION DATA DI	tion	Manual	Est Time	2	1	1		2			• 5	• • • • • • • • • • • • • • • • • • •	ation		Est Time									
	Implementation	Automated	Cost \$	2040	700	2040	820		220	600	75	\$6495	Implementation	Automated	Cost \$	4120	700	3090	8 60		70	130	35	\$9005
	Imple	Auton	Est Time	2	1	2	1		100	4	.5		Impl	Auton	Est Time	4	1	3	1		30	2	5,	37
POR SPECIAI		Estimated	Rate \$	1020/mo.	700 /mo.	1020 /mo.	820 /mo.	500 /mo.	2.20 /hr.	150 /hr.	150 /hr	TOTALS		Estimated	Rate \$	1030 /mo.	700 /mo.	1030 /mo.	860 /mo.	/mo.	2.30 /hr.	65 /hr.	65 /hr.	TOTALS
COST ESTIMATE FOR SPEC	ıska			taff	gner	lyst				Process	MRPM	TC	ada			z.ff	ner	/st				Process	MRPM	TC
COSTE	State: Nebraska	Recolling	Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	***************************************	Computer		State: Nevada		Category	Spac. Ed. St. ff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Computer		

ERIC Full Text Provided by ERIC

New Hampshire New Jersey

LEVEL		FAM EAM	P computer	established .	q		•								andent of the rement		ge unknown;		sey		בא פאר		 .		
IAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Ö	* Currently using EAM	equipment, EDP computer	charge not yet established										Comments:	Estimate is independent of the Educational Management	Information System under development	* Computer charge unknown;	computers are 360/models	40 and 50	** Does not include a charge	ior computer usage				
PM APF		nated	ZĮ.	Cost \$	525		260		250	90			\$1125			Cost \$									
ND MR	ance	Automated	EA	Est Time	.5		.25		5.	40		.5	05	ance		Est Time									
INT AP	Maintenance	ated	ايم	Cost \$	1050		260			70			\$1380	Maintenance	Automated	Cost \$	2120		265	90		1750			**\$4225
LOPMI	Mē	Automated		Est Time	1		.25			30	2	.5		M	Autor	Est Time	2		.25	٦.		700	4	.5	*
DEVE		ated	×	Cost \$	1050		1050		250	90			\$2440			Cost \$									
DATA	tion	Automated	EAI	Est Time	-		г		.5	40		.5		tion		Est Time									
EDUCATION DAY	menta		П	Gost \$	2100	350	2100	425		90			\$5065	Implementation	ated	Cost \$	4240	700	4240	1300		1800			00001077
	Imple	Automated		Est Time	2	.5	2	.5		40	3	5.		Impl	Automated	Est Time	4	1	. 4	1.5		720	9	.5	*
ECIAL					/mo	/mo.	/mo.	850 /mo.	500 /mo.	/ _{Er}	/hr.	/hr.			ited	 0	1060 /mo.	700 /mo-	/mo.	870 /mo-	/mo.	/hr.	/hr.	/hr.	
FOR SE	,		Estimated	Rate \$	1050	700	1050	850	500	2.30 /hr	*	*	TOTALS		Estimated	Rate \$	1060	700	1060 /m	870		2.50	*	**	7 4 8 0 8
COST ESTIMATE FOR SPEC	II amanah tu	medinen		.	Staff	gner	lyst				Process	MRPM	TC	New Jersey			taff	ner	yst				Process	MRPM	
COSTE	CI+ 2 # 2 11 C	Place: New Hampshire	Resource	Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch		Computer		State: New	- 1 :	Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Cierical	Keypunch	Computer*		

New Mexico New York

CÓSTE	cost estimate for spe	FOR SPECI	AL EDU	CATIO	n dat	A DEVE	LOPME	INT AN	D MRI	M AP	CIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
State: New	New Mexico	•	Imp	Implementation	ation		Mē	Maintenance	nce		Comments:
Resource		Estimated	Summ	Summ. Syst.			Summ. Syst	Syst			Computers: 15M 1401 H 101 processing; 1BM 360/50
Category		Rate \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	for MRPM
Spec. Ed. St	Staff	1030 /mo.	5. 3	3090			1	1030			
Forms Designer	ner	om/ 002	0. 1	700							
System Analyst	rst	1030 /mo.	55	515					·		
Programmer		сш/ 098	.5	430		j	. •	06	•		
Clerical		ош/ .									
Keypunch		2.30 /hr.	90	210			80	185			
Computer	Process	0 /hr.	5				4	:			
	MRFM	90 /hr	.5	45			.5	45			
)L	TOTALS		\$4990		1	\$	\$1350			
State New York	Vork		Imp	Implementation	ition		Ma	Maintenance	nce		Comments:
Resource		Estimated	Auto	Automated		-	Automated	nated		,	*No computer usage charge assumed
Category		Rate \$	Est Time	Cost \$	Est Timo	Cost \$	Est Time	Cost	Est Time	Cost \$	** Most input documents are in
Spac. Ed. Staff	taff	1060 /mo.	2	2120			1	1060			machine readable iormals, i.e., mark sense
Forms Designer	ner	700 /mo.	.5	350				-			
System Analyst	yst	1060 /mo.	2	2120			.25	265			
Programmer		870 /mo.	-	870			1	90			
Clerical		/mo.	į								
Keypunch*		2.50 /hr.	100	250			90	225			•
Computer	Process	* /hr.	15				10				
	MRPM	* /hr.	.5				.5				
	TC	TOTALS		\$5710			\$	\$1630			

North Carolina North Dakota

COST ESTIMATE FOR SPE	R SPECIA	L EDUC	ATIO	I DAT	A DEVE	LOPME	INT AN	D MR	M API	CIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
	ä	ip,	Implementation	tion		Ma	Maintenance	nce		Comments:
Estimated	Aut	EAL	Automated EAM			Automated EAM	lated			Data Processing Equipment: IBM 407
Rate Est \$ Time	Est Time	_	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	MRPM computer capacity will
1000 /mo. 2	2		2000			-	1000			
700 /mo.	•	5	350							* No computer charge assumed
1000 /mo. 2			2000			.25	250			
870 /mo.	•		435							
400 /mo.		2	200			.5	200			
2.30 /hr. 125	125	$\neg \neg$	290			120	275			
* /hr. 6	9					4				,
* /hr5	5.					•2				
TOTALS		1	\$5275			<i>S</i>	\$1725			
Impl	Imp		Implementation	tion		Mē	Maintenance	nce	П	Comments:
pe	Auton			Manual	ıal	5	Automated		lal	Computer: RCA Spectra 45
Rate Est \$ Time	Est Time		Cost	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	* Included in Systems Analyst
1020 /mo. 2	2		2040	1	1020	.25	255	.5	510	** No committee means character
/то.*	*	_		*						assumed
1020 /mo3	3		3060	3	3060	.25	255			
820 /mo- 1	-	_	820	[1]	[820]	.25	205			
400 /mo5	.5	- 1	200	1.5	009	.5	200	[-1:5]	[-88 3]	
2.20 /hr. 30	30	-	65	52	55	25	55	25	55	
/hr. 4	4					2				
/hr. 5						.5				
TOTALS		S	\$6185	Man :	4/35	8	\$970	Man . 51165 [565	1165 [565]	

Ohio Oklahoma

COST	STIMATE	FOR SI	ECIA	EDUC	CATIO	N DATA	DEVE	LOPME	'NT AN	D MR	M APF	COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL
State: Ohio	0			Imple	Implementation	tion		Ma	Maintenance	nce		Comments:
Resource	1	Estimat	ted	Automated	nated			Automated	ated			Computer - Honeywell 200 (65K)
Category	,	Rate \$:	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	* No computer usage charges have been assumed
Spec. Ed. Staff	taff.	1040	/mo.	3	3120			1	1040			
Forms Designer	gner	700	/mo	1	700							
System Analyst	lyst	1040	/mc.	4	4160		,	.25	260			
Programmer		850	/mo.	1.5	1275			.25	210			
Clerical			/mo.									
Keypunch		2.50	$/\mathrm{hr}$.	650	1625			640.	1600	·	: .	
	Process	*	/hr.	9				4				
כסווולוווסס	MRPM	*	/hr.	. 5				Ġ.				
	T(TOTALS		\$1	\$10880			U.	\$3110			
State: Okla	Oklahoma			Impl	Implementation	ation		Ma	Maintenance	nce		Comments:
ı				Auto.	Auto. Data Mod.		Pupil	Auto. Data	Data	Mod.	Pupil	
Resource		Estimat	ed.	Summ.		- [Syst.	Summ.	Syst.	Acct.	Syst.	Computer: RCA Spectra 70/35
Category		Kate \$	<u> </u>	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	Est Time	Cost \$	* No computer use charge
Spec. Ed. Staff	aff	990	/mo.	3	2970	4	3960	1	066	1	990	
Forms Designer	ner	700	/mo.	.75	525	1	700					
System Analyst	/st	066	/mo.	.5	495	2	1980			7	100	
Programmer	•	840	/mo.	.5	420	1.5	1260	.1	85	.25	210	
Clerical			/mo									
Keypunch		2,30	/hr.	200	460	350	805	190	440	09	140	
Computer	Process	*	/hr.	3		10		2		4		
	MRPM	*) Pt.	.5		5		.5		5		
	T(TOTALS		\$	\$4870	\$	\$8705	\$1	\$1515	\$	\$1440	

Pennsylvania COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL * No computer usage charge Computer: IBM 360/40 Comments: Comments: assumed Cost \$ Cost \$ Est Time Est Time Maintenance Maintenance Mod. Pupil Acct. Syst. Est Cost Cost \$ 215 100 1060 125 325 40 \$1865 220 475 530 285 \$1510 Automa ted 22 Est Time 25 Time 25 s 'n Ŋ 90 50 Cost \$ Cost ₩ Est Time Est Time Implementation Implementation 870 Cost \$ 500 \$9640 Cost \$ 2650 700 2120 500 \$6840 4240 7.00 750 40 2120 1290 Mod. Pupil Automated Acct. Syst 2.5 1.5 Est Time Time 'n 10 200 9 2.50 /hr. 200 /Pr mo. /mo. /mo. /mo. 1060 mo. /mo. /mo. 75 /hr. 700 /mo. 1060 /mo. /mo 2.50/hr. 늄. 75 /hr. Estimated Estimated Rate \$ 7007 Rate \$ 870 / 1060 1060 860 TOTALS TOTALS * Process Process MRPM MRPM State: Pennsylvania Spec. Ed. Staff Forms Designer System Analyst State: Oregon Spec. Ed. Staff Forms Designer System Analyst Resource Category Category Resource Programmer Programmer Keypunch Computer Clerical Keypunch Computer Clerical

Oregon

j

]

Section 1

ERIC Full Text Provided by ERIC

Rhode Island South Carolina

State: Rhode Island											
Signature String	COST ESTIMATE	FOR SPECIAL	L EDUC	ATION	V DAT	\ DEVE	LOP ME	NT AN	D MRI	M API	PLICATION AT STATE LEVEL
Rate	State: Rhode Island		Imple	menta	tion		Ma	intena	nce		Comments:
Rate	Been actioned	Estimated	Auton	na ted			Autom	ated			* Included in System Analyst
tf 1060 mo. 1 1060 mo. 2 2120	Category	Rate \$	Est Time	Cost \$	Est Time	Cost \$		1	Est Time	Cost \$	time ** Rented computer
t 1060 /mo. 2 2120	Spec. Ed. Staff			1060			.5	530			
t 1060 /mo. 2 1720	Forms Designer	/mo.			÷			:			
R60 /mo. 2 1720 2 215	System Analyst	\		2120			.5	530			
Amores A	Programmer			1720			.25	215			
2.50/hr. 35 90 90 10 10	Clerical	\									
ARPM 100 /hr. 4 400 1 100 5 50 1 100 100 100 /hr. \$5440 \$100 \$1500 <th< td=""><td>Keypunch</td><td>2.50/hr.</td><td>35</td><td>90</td><td></td><td></td><td>30</td><td>75</td><td></td><td></td><td></td></th<>	Keypunch	2.50/hr.	35	90			30	75			
MRPM 100 /hr. \$5440 .5 50 50 50 Altonated \$1500 Automated A		`	4	400			н	100			,
TOTALS \$ 5440 \$ 1500 \$ 1540 \$ 1500 Automated											

_													11					ith :			ì				
AL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	Computer IBM 360/40	* Included in System Analyst	** No computer usage charges	assumed.									Comments:	* This is in addition to the cost	of the intradepartmental system.	** Included in System Analyst	time	uter usage charge	assumed					
IRPM A			Cost \$													Cost \$									
AND M	ance		Est Time											ance		Est Time				•					
TENT /	Maintenance	pated	Cost \$	255		255	202	200	35			\$950		Maintenance	Automated (both)	Cost \$	525		260	200	200	220			\$1405
ELOPA	Mā	Antomated	Est Time	.25		.25	٦.	.5	15	2	.5				-	E F	.5		. 5	.25	.5	001	4	.5	V
'A DEV.			Cost \$												Interdepart-	Cost \$	1050		1050	200					\$2300
N DAT	tion		Est											tion	Interd	Est Time	1		1	.25					Ů,
CATIO	Implementation	ated	Cost \$	2040		3060	820	200	45			\$6165		Implementation	gred part-	Cost \$	2100		3150	300	400	220			\$6670
L EDU	Imple	Antomated	Est	2	*	က	Н	.5	20	4	.5			Impl	Automateu Intradepart- mental	Est Time	. 2	*	.3	Н	н	100	4	. 5	
PECIA				mo.	/mo.	1020 /mo.	/mo.	400 /mo.	2.20/hr.	/hr.	/hr.				sted	<i>(</i> 1)	mo.	/mo.	1050 /mo.	800 /mc.	400 /mo-	2.20/hr.	/hr.	/hr.	
FOR S			£stimated Rate \$	1020		1020	820	400	2.2	*	*	TOTALS			Estimated	Rate \$	1050		1050	800	400	2.2	***	***	TOTALS
cost estimate for specu	h Dakota	mount ii	φ λ	Staff	gner	lyst				Process	MRPM	TC		essee		١ ٠.	taff	ner	yst				Process	MRPM	TC
COST	State South Dakota		Resource Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	10 m	Compared			State: Tennessee	Document	Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Computer		esta san

											1						Texa						
AND MRPM APPLICATION AT STATE LEVEL		Computers: UNIVAC 1050 for processing; IBM 360/50 for MRPM	* No computer usage charges	assumed							Comments:	Comments: * Included in System Analyst time Computer: RCA Spectra 70/45											
EDUCATION DATA DEVELOPMENT AND MRPM AP	ed Pu	Systen Cost \$	1050		100	200		1565		125	\$3040		Cost \$										
	nce Modifi	pil Ac ting Est Time	-			.25		089	8	.5	,,	nce		Est									
	Maintenance orgated Mod	Systen Cost	1050			80		3200		125	\$4455	Maintenance	ated	Cost \$	515		260	215	200	90	400	50	\$1730
	Ma	Data S mary Est Time	П			-		1390	8	.5	0,	Ma	Automated	Est	.5		.25	.25	.5	40	4	.5	-03-
	-nd be	coun- ystem Cost \$	4200	700	2100	1290	•	7820		125	16235			Cost \$									
	tion	r pil Ac ting S Est Time	4	7	2	1.5		3400	20	.5	\$	Implementation		Est								_	
	Implementation	Data Summary pil Accoun-Data Sum- pil Accoun- System ting System mary System ting System Est Cost Est Cost Est Cost Est Cost Time \$ Time \$ Time \$	3150	700	1050	860		3220		125	\$ 9105	ementa	nated		2060		2060	860	400	90	400	50	\$ 5960
L EDU(Imple	Data Su Syst Est Time	3	-	7	1		1400	10	пŝ		Impl	Automated	Est Time	2	*	.2	1	-:	40	4	ъ.	
COST ESTIMATE FOR SPECIAL		Estimated Rate \$	1050 mo.	700/mo.	1050/mo.	.om/098	/mo	2.30/h:	* /hr.	250/hr.	TOTALS		Totimotod		1030 mc.	/mo	1030 /mo.	860 /mo	400 /mo.	2.30/hr.	100 /hr.	100 /hr.	TOTALS
	as		Staff	gner	lyst				Process	MRPM	ĵ			-	taff	ner	yst				Process	MRFM	TO
COST	State: Texas	Resource Category	Spec. Ed.	Forms Designer	System Analyst	Programmer	Clerical	Keypunch		Computer		0+2+0	Ţ	Resource	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Computer		

Vermont Virginia assumed for processing values *** No computer usage charge estimated average rental cost * Included in Systems Analyst * Input: Division summaries Computers: IBM 360/Model 25; undetermined for MRPM COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL shown for MRPM represent ** Input: Teacher/class Comments: Comments: reports Est Cost Time \$ 525 Auto. Data* Auto. Data* Summary System System Input 260 45 Cost \$ 400 \$1230 1000 85 320 75 \$1480 Manual 25 Time 'n Maintenance Est Maintenance 140 Cost \$ 45 Cost \$ 300 525 525 210 65 1000 75 Automated \$1370 85 \$1460 Time 25 Time Est S Est S S r, 130 25 1050 2100 400 45 Auto. Data* Auto. Data** Summary System Cost \$ \$3595 Cost \$ \$5050 345 3000 700 500 435 Automated | Manual Time Est ī. r. ı. [mplementation Implementation 0 150 'n 3675 2100 850 70 340 \$7080 Cost 320 Cost 2000 700 500 435 25 \$4035 ₩ е В Est Time Time . 5 ż. ı, 0 30 2.30/hr. 140 /mo-1050 mo. mo. 1050/mo. 400/mo. 1000/mo. 850/mo. 85/hr. 1000 mo. 700/mo. 870/mo. /hr. 150/hr. 2.30/hr. 85/hr. Estimated Estimated Rate Rate \$ TOTALS *** TOTALS Process Process MRPM MRPM Virginia Spec. Ed. Staff Forms Designer System Analyst Spec. Ed. Staff State: Vermont Forms Designer System Analyst Resource Category Category Resource Programmer Programmer Keypunch Computer Clerical Keypunch Computer Clerical State:

Washington West Virginia

CIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL	Comments:	* Included in System	,	already in effect. No addi-	tional cost anticipated				· · ·				Comments:		Process Computer	Burroughs 3000	MKPM Computer — 1BM 300/		No computer usage criatge			 1			
MRPM	*		Cost le \$												Ì	Cost								_	
AND	ance		Est Time								_		ance	L	_1	Est Time									
MENT	Maintenance	Automated	Cost \$						200	*	50	\$250	Maintenance	afed		Ços‡ \$	500		250	220		90			\$1060
ELOPI	M	Autc	Est Time	*		*	*		80	*	.5		M	Antomated		Est Time	.5		.25	.25		40	2.	.5	
ra dev			Cost \$													Cost \$									
N DA	tion		Est Time										tion			Est Time									
CATIO	Implementation	nated	Cost \$	530		1060	860		200	200	50	\$2900	Implementation	ated	\neg	Cost \$	2000	350	4000	870		105			\$7325
L EDU	Impl	Automated	Est Time	.5	*	1	1		80	2	.5		Tmp	Antomated	1	Est Time	2	.5	4	1		45	4	.5	97
PECIA		ated	υ ·	om (/mo.	1060/mo.	860/mo.	/mo	2.50/hr.)/hr.	100/hr.			7	rea Lea		mo.	7 00 / mo.	1000/mo.	870/mo.	/mo.	/hr.	/hr.	/hr.	
FOR S		Estimated	Rate \$	1060		106(860		2.5	100/h	100	TOTALS			Estimale	Rate \$	1000	700	1000	870		2.30,	*	*	TOTALS
COST ESTIMATE FOR SPE	hington			Staff	gner	lyst				Process	MRPM	TC	Virginia	_ -			aff	ner	/st				Process	MRPM	TC
COST	State: Washington	ACTIOS SA	Category	Spac. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	000000000000000000000000000000000000000	Compared		einimin troot Minimin	מומופי אכמו	Resource	Category	Spec. Ed. Staff	Forms Designer	System Analyst	Programmer	Clerical	Keypunch	Compare		

Wisconsin Wyoming Process Computer: IBM 360/30 (32K word storage) required ** No computer usage charge MRPM Computer capability No computer usage charge COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL MRPM computer requires Processing Computer -- IBM 360/30 * Included in Systems 32K word storage Analysts time assumed assumed Comments: Comments: Cost \$ Cost \$ Est Est Time Maintenance Maintenance Cost \$ 210 \$1550 260 \$1600 1040 90 1030 260 215 45 Cost Automated Automated Est Time Est Time .25 .25 .25 .25 36 20 ~ Cost \$ Cost \$ Cost Est \$ Time Est Implementation **Implementation** 850 \$6150 Cost \$ 2600 2600 100 350 430 9 2575 2060 \$5475 Automated Automated Est Time 2.5 2.5 Time 2.5 r, ٦, 'n 'n Est 40 ~ 2.30/hr. 25 1040 mo. /mo. /hr. /hr. 1040/mo. 850/mo. 1030/mo. 2.50/hr. 늄. 1030 mo. ош/098 꺄. 700/mo Estimated Estimated Rate \$ Rate \$ * * TOTALS TOTALS Process MRPM Process MRPM State: Wisconsin Spec. Ed. Staff Forms Designer System Analyst State: Wyoming Spec. Ed. Staff Forms Designer System Analyst Resource Category Resource Category Programmer Computer Programmer Keypunch Computer Clerical Keypunch Clerical

]

(4) (2) A